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ABSTRACT

The first-year activities of a project designed to implement the Experience Based Career Education (EBCE) program developed by the Appalachia Educational Laboratory at Greely High School, Maine School Administrative District #51 are described. Assessment of student outcomes used a pre- posttest design with one experimental group consisting of twenty-eight students participating in the Cumberland EBCE program (CEB) at Greely High School, and two comparison groups from neighboring Yarmouth High School. Through the use of standardized tests it was demonstrated that there are no deleterious effects on student academic performance from participation in the program. There were no ascertainable differences between the CEB students and students in comparison groups in obtaining career education knowledge, attitudes, and skills which can be clearly attributed to participation in CEB. Based on questionnaire and interview data, the project's efforts received the endorsement of its enrollees with ten of the fourteen eligible 1977 participants re-enrolling and four returning to traditional classrooms. Of the parents of enrolled students, ninety-four percent indicated that EBCE is a worthwhile program. (Appendixes include third-party evaluation plan, site visit reports, and a workshop feedback form.) (TA)

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INTERIM REPORT

Project No. 502AH60100
Grant No. G310-76-0050

Experience Based Career Education
Career Development: A "K to 12" Model
for an Urban School District

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

Roy Bagley
Maine School Administrative District #51
Cumberland Center, Maine 04021

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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October 17, 1977

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Project Director

Maine School Administrative District #51
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October 17, 1977

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Summary of the Report

Problem Area Toward Which the Project was Directed

MSAD #51 has addressed Program Priority Area #1 as defined in the federal register Thursday, November 13, 1975: Demonstration of the National Institute of Education's, Experience Based Career Education program developed by Appalachia Educational Laboratory.

MSAD #51 has operated the EBCE program since September 17, 1976 in areas of the program planning and staff training and has operated with students since February 1, 1977. This report covers the project's entire first year and first weeks of the second year. The project has been able to implement AEL's program model with very few exceptions.

Greely High School faculty, contributed much to the development of the project as well as the first semester curriculum offerings. Although we did offer many of the AEL courses, we also offered all Greely High School courses.

Greely High School students take five courses each semester. AEL recommends that a student take two or three courses per semester. The students with additional courses found them to be more traditional.

The project proposal called for special activities that would provide sex fair guidance and that would contribute to the reduction of sex-role stereotyping. As a result of July 1977 federal evaluation visit, the project has redesigned group guidance techniques to guarantee that each student participates in activities that will help reduce sex-role stereotyping and encourage the exploration of appropriate careers with special emphasis on the non-traditional sex roles.

Goals and Objectives of the Project:

The goals of the project included student objectives related to implementing the AEL model of EBCE and secondly, providing technical assistance and training to potential adopters of EBCE in Region 1. The following are objectives for these goals:

I. Student Objectives

- A. EBCE students will increase their abilities in the basic skills areas.
- B. EBCE students will increase their knowledge of the world of work.
- C. EBCE students will improve in the life skills needed for their transition to adulthood.
- D. EBCE students will have a positive attitude toward EBCE.
- E. Parents of EBCE students will have a positive attitude toward EBCE.

II. Outreach Objectives MSAD #51's EBCE program will:

- A. Develop a plan for outreach to include slide tape presentations.
- B. Develop as a training center.
- C. Develop expertise to provide technical assistance.
- D. Develop an evaluation program

Twenty-six specific functions were defined in the proposal for the implementation of these goals and objectives. Progress on these functions are reported in the evaluation section of this report.

Description of General Project:

On September 17, 1976, the Maine School Administrative District #51 received notification of the grant award. The full grant was \$113,247.00. Roy Bagley was hired as Project Director. Paula Barnaby Smith was hired as the Assistant Project Director and Learning Coordinator.

The Project Director negotiated with Appalachia Educational Laboratory to develop a contract with MSAD #51's EBCE program to train staff. The Project Director negotiated a contract with New Educational Directions as the third party evaluator.

On November 1, 1976, the Project Director, Assistant Director, Learning Coordinator, and two members from the New Educational Directions staff attended a training session in Charleston, West Virginia conducted by the Appalachia Educational Laboratory. Robert Laberge, the newly hired Learning Coordinator, resigned his position after his return. On December 1, Marcia Golembeski was hired to replace Mr. Laberge.

A workshop was conducted by Karen Pfiffner of Appalachia Educational Laboratories in early November for the Greely High School faculty as well as the EBCE staff.

We began our recruiting activities in early December. As a result of the recruiting efforts, twenty-eight students were selected to participate in the first semester of operation at Greely High School. These twenty-eight students took a total of one-hundred ten student courses involving some thirty-two separate preparations by these Learning Coordinators.

On February 1, 1977, Peggine Jones was hired as the Placement Coordinator. Because of the additional anticipated enrollment, a third Learning Coordinator was hired. Robert Melaragno reported to work in June of 1977. The first MSAD #51 EBCE workshop to train Learning Coordinators, Site Analysts, and Placement Coordinators was held in June 1977 and involved five people. Yarmouth High School had been involved in the EBCE program by supplying the students for control group testing. As a result, three Yarmouth students enrolled in EBCE for the second year. A total of thirty-three students are currently participating in MSAD #51's EBCE program.

The MSAD #51's EBCE project has hired three very unique Learning Coordinators. They are willing to put in many hours of overtime without compensation to provide a quality program for their students.

Results

Twenty-eight students have completed one semester. As a result of New Educational Directions' report, we believe we have accomplished what our proposal set out to do to develop the AEL model of EBCE in MSAD #51 school system. We have adapted it to meet Greely High School's unique characterization.

Recommendations

We recommend that the EBCE project be funded for a second year. We also recommend that MSAD #51 School Board establish one Learning Coordinator as a district employee as of September, 1978.

Problem Area Toward Which the Project was Directed.

MSAD #51 has addressed Program Priority Area #1 as defined in the federal register Thursday, November 13, 1975: Demonstration of the National Institute of Education's, Experience-Based Career Education program developed by Appalachia Educational Laboratory. As described in the federal register, extensive research was conducted by the National Institute of Education by four separate educational laboratories: AEL, Research for Better Schools, Northwest Laboratory, and Far West Laboratory. EBCE is an educational program that includes the following:

1. Awarding of credit in academic subjects including, English, Science, Math, and Social Studies for completion of EBCE projects in the community. This credit will contribute to the requirements of a standard diploma.
2. Provide that the basic educational program will involve work throughout the community with access to adults in their normal working environment.
3. Insure that each student has an individualized learning plan with sufficient student input.
4. Insure that within the overall learning plan, the experience is defined to integrate career decision-making skills, basic academic skills, and skills needed in life roles.

MSAD #51 has operated the EBCE program since September 17, 1976 in areas of the program planning and staff training and has operated with students since February 1, 1977. This report covers the project's entire first year and first weeks of the second year. The project has been able to implement AEL's program model with very few exceptions. Fidelity studies conducted by AEL and third party evaluator, New Educational Directions (NED), have indicated close similarity between the project model and AEL model. It should be noted that there is an inherent conflict in the AEL philosophy verses application of the EBCE model. AEL's philosophy calls for integration of academic subjects through community sites. All training and materials available from the AEL model indicates, however, that some academic subjects need to be taught in a traditional sense. It should be noted that disciplines of a technical nature have the greatest conflict. This does not mean that the courses are not individualized, only that in practice there are very few activities that can be integrated with site experiences for technical concepts, such as, Advanced Mathematics, Physics, and Chemistry.

Greely High School faculty, representing a distinguished group of academically outstanding educators, contributed much to the development of the project as well as the first semester curriculum offerings. Although we did offer many of the AEL courses, we also offered all Greely High School courses with specific curriculum content equivalent to Greely High School regular programming.

The MSAD #51 School Board has adopted the policy that all Greely High School students take five courses each semester. AEL recommends that a student take two or three courses per semester. The project's interdisciplinary activities during the first semester were similar in depth to the AEL model for students with two or three courses. The students with additional courses found them to be more traditional utilizing text books with less community activity. In the attempt to implement the pure AEL model as well as to provide each student with the proper number of quality courses, we have reduced the number of courses an EBCE student can take to four. We found that when a student took a Greely High course in EBCE, there was duplication of activities. Example: In order to teach a student how to develop a good paragraph, the Greely High School curriculum may require

reading a series of short stories with essay reports developed by students for their writing experience. The EBCE method would require the student to maintain a journal of their daily activities. Since each method accomplishes the same goal, improved writing skills, using both is redundant. As a result of on-going evaluation from MSAD #51, EBCE staff, and students the project has revised its methodology and instruction and is now limited to the AEL model. We have continued, however, to offer the opportunity to take more than the required courses, as well as to provide the opportunity for students to take courses, developed by project and MSAD #51 staff, in addition to the AEL model.

The project proposal called for special activities that would provide sex fair guidance and that would contribute to the reduction of sex-role stereotyping. This was a deviation from the AEL model in that there were no specific guidance models offered. The project has devoted energy via the group guidance activities as well as the placement procedures, which we consider a non-discriminatory practice, which has provided awareness of non-traditional career opportunities for both sexes. As a result of the July 1977 federal evaluation visit, the project has redesigned group guidance techniques to guarantee that each student participates in activities that will help reduce sex-role stereotyping and encourage the exploration of appropriate careers with special emphasis on the non-traditional sex roles. It should be noted in the evaluation section of this report that there were fourteen non-traditional sex-role placements. What was omitted was an indication of the non-traditional sex-role resource people utilized. Considering both of these facts, we believe that we demonstrated to our students the reality of opportunity in non-traditional sex-role careers.

Goals and Objectives of the Project:

The goals of the project included student objectives related to implementing the AEL model of EBCE and secondly, providing technical assistance and training to potential adopters of EBCE in Region 1. The following are objectives for these goals:

I. Student Objectives

- A. EBCE students will increase their abilities in the basic skills areas at least as much as comparison groups of students enrolled in traditional high schools.
- B. EBCE students will increase their knowledge of the world of work and career awareness skills; will increase knowledge of their own abilities, interests, and aptitudes in relation to careers, and will have positive attitudes toward career planning.
- C. EBCE students will improve in the life skills needed for their transition to adulthood (e.g., learning to assume more responsibility for themselves, communicating with others in a mature way) and will increase their motivation to learn.
- D. EBCE students will have a positive attitude toward EBCE and a positive assessment of the effectiveness of EBCE.
- E. Parents of EBCE students will have a positive attitude toward EBCE and a positive assessment of the effectiveness of EBCE.

II. Outreach Objectives MSAD #51's EBCE program will:

- A. Develop a plan for outreach to include slide tape presentations, printed announcements, staff presentations at professional meetings, etc.
- B. Develop as a training center.
- C. Develop expertise to provide technical assistance.
- D. Develop an evaluation program that will provide technical data on the effectiveness of EBCE.

Twenty-six specific functions were defined in the proposal for the implementation of these goals and objectives. Progress on these functions are reported in the evaluation section of this report. In addition, the following changes have occurred:

Function 2: As of July, 1977, an additional Learning Coordinator was hired. This Learning Coordinator also assumes the major responsibility for the guidance group and is a certified guidance counselor. The only other staff changes to date involved the project secretary. The position of project secretary and a resource person for business education are now being filled by two separate individuals. The resource person in business education works approximately twelve hours a week.

Function 3: Transportation needs changed with the increased number of students and the larger geographical location of sites. As a result, a second vehicle purchased by MSAD #51 has now become the second vehicle for the project.

Function 4: Following the recommendation of the federal evaluation team, the office has been renovated to provide for more private office space for the Learning Coordinators as of September, 1977.

Function 5: EBCE Orientation to Greeley High School.

As a result of students, staff, NED, and federal evaluation team recommendations, more communication has occurred with high school faculty as of September, 1977. The project staff are committed to publishing a career gram with sufficient frequency to update Greeley High School staff on students' activities and placements and to provide project status reports.

Function 6: Project staff attended the AEL National Conference in Kansas City and as a result revised techniques for implementing and adapting the AEL model.

Function 7: Site Analysis

During the summer of 1977, the EBCE staff did extensive site analysis. As a result, twenty-two learning guides were developed for the second year of operation.

Function 8: In addition to the twenty-eight courses offered by AEL's model, MSAD #51 staff have developed curriculum for the following subjects: Art, French, Typing 1 and Typing 2, Shorthand 1 and Shorthand 2, Accounting, and Office Procedures.

Description of General Project:

On September 17, 1976, the Maine School Administrative District #51 received notification of the grant award for an April 19, 1976 proposal to develop an Experience Based Career Education program at Greely High School. The full grant was \$113,247.00. Upon notification of this grant, Roy Bagley, author of the proposal was hired as Director. Immediately following his employment, interviewing began to hire additional staff. Paula Barnaby Smith, Career Education Educator from MSAD #51 was hired as the Assistant Project Director and Learning Coordinator.

The Project Director negotiated with Appalachia Educational Laboratory to develop a contract with MSAD #51's EBCE program to train staff in Appalachia Educational Laboratory's EBCE model and to provide technical assistance. The Project Director negotiated a contract with New Educational Directions as the third party evaluator.

During the month of October, extensive interviewing was conducted and finally a Learning Coordinator was hired. On November 1, 1976, the Project Director, Assistant Director, Learning Coordinator, and two members from the New Educational Directions staff attended a training session in Charleston, West Virginia conducted by the Appalachia Educational Laboratory. The week long training session was designed to train Learning Coordinators, Site Analysts, Directors, and Placement Coordinators. Upon completion of the session, the staff returned to MSAD #51 to begin site development and about the same time Robert Laberge, the newly hired Learning Coordinator, resigned his position. An immediate search was conducted for a new Learning Coordinator and as of December 1, Marcia Golembeski was hired to replace Mr. Laberge. Marcia immediately went to Charleston, West Virginia to complete a week of training at the Appalachia Educational Laboratory site. Upon her return to MSAD #51, the staff continued to develop sites and prepare learning guides.

In compliance with the proposal, a workshop was conducted by Karen Pfiffner of Appalachia Educational Laboratories in early November. The workshop involved Greely High School faculty as well as the EBCE staff, with the goal of reviewing AEL's curriculum and MSAD #51's curriculum to see if an appropriate program could be established for the EBCE program here in Cumberland. As a result of the successful turnout and participation by Greely High staff, we were able to review all academic areas of the curriculum satisfactorily and did not need to have the follow up workshops that were originally planned in the proposal.

In early December, we began our recruiting activities which involved meeting with the Junior and Senior classes at Greely High School to explain the program. A follow up meeting with interested students and their parents was established to discuss EBCE as a concept.

In addition, we produced a brochure that was disseminated to the community as well as educators in Maine. Utilizing the MSAD #51 newsletter, we notified all citizens of the towns of Cumberland and North Yarmouth of the existence of EBCE and the alternatives it offers our students. As a result of our recruiting efforts, twenty-eight students were selected to participate in the first semester of operation at Greely High School. An evaluation plan called for extensive testing which is reviewed in the evaluation section of this report. Twenty-eight students started a one week orientation period on February 1, of 1977. To insure continuity of programming, the orientation program was conducted by Karen Pfiffner, from Appalachia Educational Laboratory, and EBCE staff. The twenty-eight students were a cross section of the Greely High School student body and after extensive review, no common characteristics could be identified with all students.

On February 1, 1977, Peggie Jones was hired as the Placement Coordinator of the EBCE project. This position is part-time and it is pro-rated at the salary of a first year teacher. As outlined earlier in this report, we are offering courses in business education as a result of students' requests. We offered programs such as typing, shorthand, and office procedures. The project secretary was a certified business education teacher who also worked part-time in this capacity. The amount of time was equivalent to two-sevenths of a regular teacher. The two and two-sevenths Learning Coordinators worked with twenty-eight students in all discipline areas. These twenty-eight students took a total of one-hundred ten student courses involving some thirty-two separate preparations by these Learning Coordinators. All courses were individualized and the Learning Coordinators work one on one with their students. In preparing for second year operation of the EBCE program, it was decided that a major emphasis should be placed on the guidance component of the AEL model. Because of the additional anticipated enrollment, a third Learning Coordinator was hired. Robert Melaragno reported to work in June of 1977, to participate in the first MSAD #51 EBCE workshop to train Learning Coordinators, Site Analysts and Placement Coordinators. Five people were trained in this workshop. Second year recruitment activities involved similar activities that were used for the first year. We did meet with all the Junior and Senior classes at Greely High School. Yarmouth High School had been involved in the EBCE program by supplying the students for control group testing. As a result of the interest expressed by the principal and guidance counselor at Yarmouth High School, an agreement was made with the Yarmouth School Board and three students enrolled in EBCE for the second year. On September 7, 1977, one student did drop from the program after orientation week. In addition, a number of students applied and four were accepted before the add/drop period was over. A total of thirty-three students are currently participating in MSAD #51's EBCE program.

In order to define common characteristics of Learning Coordinators, one must first recognize that although the four laboratories have done extensive research in this area, no common characteristics have been clearly identified. The MSAD #51's EBCE project has hired three very unique Learning Coordinators. The most common characteristic is that they are all totally committed to the concept of the project. They do not work under guidelines of a seven hour work day. They are willing to put in many hours of overtime without compensation to provide a quality program for their students.

Results.

The results of this project to date are that twenty-eight students have completed one semester in the methods described earlier in this report as of June, 1977. Although many of the twenty-eight students are currently employed, we believe it to be too early to consider the success stories of these students as directly attributed to their experiences in EBCE. However the evaluation plan calls for a follow up study a year from now to review the status of those students. As a result of New Educational Direction's report, we believe we have accomplished what our proposal set out to do to develop the AEL model of EBCE in MSAD #51 school system. We have adapted it to meet Greely High School's unique characterization and to make what we believe to be a more functional and complete program to serve the students in MSAD #51.

Evaluation.

NED Report (See Appendix 1)

Recommendations.

We recommend that the EBCE project be funded for a second and third year to complete its proposed objectives. We also recommend that MSAD #51 School Board establish one Learning Coordinator as a district employee and pay the salary as of September, 1978. This is a major step in the local funding effort for the continuation for EBCE.



NED NEW EDUCATIONAL DIRECTIONS, INC.
a nonprofit service organization

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(Appendix 1)

First-year Third-party Report

S.A.D. 51's Experience Based Career Education Program

Cumberland Center, Maine

August 1977

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- Appendix A Evaluation Plan
- Appendix B Site Visit Reports
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I. BACKGROUND AND OVERVIEW

The project director received notification of funding for the Cumberland Experience Based Career Education Program (CEB) on September 17, 1976, and New Educational Directions (NED) began working with the project on the following Monday when the project director made his initial visit to NED's Crawfordsville headquarters.

During the period September, 1976, to January, 1977, NED worked closely with the CEB staff as they organized for the delivery of services to students. The project is in Priority Area I and elected to replicate the Appalachia Educational Laboratory (AEL) model. Members of the NED staff participated in AEL training sessions along with CEB staff members. By December 1, 1976, NED had prepared a formal three-year evaluation plan (Appendix A) which identified the twelve evaluation questions around which this report is organized. The plan was reviewed by the CEB staff and found to be satisfactory.

During the project's first year, process and formative evaluation was accomplished through the utilization of questionnaires to the project's various audiences, NED staff observations during site visits, and interviews with high school faculty, students, and project staff. The project received feedback regarding these activities through regularly issued NED site visit reports and other written reports as required (Appendix B).

The assessment of student outcomes employed a pre-post design with two comparison groups. One comparison group was drawn from S.A.D. 51's Greely High School (GHS) which was the sending school for students enrolled in CEB and the second comparison group was drawn from neighboring Yarmouth High School (YHS). YHS's and GHS's populations and instructional programs are virtually identical with the exception that YHS has not been involved in career education programs whereas GHS had school-based career education for the three years preceding CEB. The instructional programs of the two schools are traditional in nature and both schools have reputations for very high-quality academic programs.

The CEB program for its first semester of serving students was quite non-traditional. CEB students spent one day each week "in house" and four days each week at a work site. During the student's "in house" day he/she worked with a Learning Coordinator (LC) in a one-to-one tutorial mode. During the student's weekly session with the LC the past week's academic assignments were reviewed and evaluated and the next week's academic program was cooperatively developed by the LC and the student including the establishment of objectives and the identification of the learning resources to be used.

Each of the points mentioned above is dealt with in more detail under the discussions of one or more of the twelve evaluation questions which follow in Section III of this report.

II. GENERAL SUMMARY

CEB staff have logged an impressive record of accomplishments for the project in less than a year as a viable program offering an alternative to the traditional high school has been made operational. True to CEB's funding proposal, the staff are applying the AEL model with reasonable and constantly improving fidelity.

Seventy-seven experience sites were established to serve the first semester's enrollees and an additional twenty-eight sites are scheduled for development during the summer of 1977. Project staff have all received training in the model and technical assistance from AEL. Services have been delivered to twenty-eight students and the projects' initial dissemination activity, a four-day workshop, has been accomplished. Through the use of standardized tests it has been demonstrated that there are no deleterious effects on student academic performance from participation in the CEB program. There were no ascertainable differences between the CEB students and students in the comparison groups in obtaining career education knowledge, attitudes, and skills which can clearly be attributed to participation in CEB. At this point in time, however, these results are not surprising. During its first semester of operation CEB did not offer elective credit in career education and it therefore was not emphasized for CEB students. It also is possible that the duration of time was not sufficient to permit measurable growth. When the project commences its second semester of serving students in September, 1977, career education credit will be available and it is anticipated that differences between groups will begin to appear.

Based on questionnaire and interview data, the project's efforts receive the endorsement of its enrollees with ten of the fourteen eligible 1977 participants reenrolling and four returning to traditional classrooms; parents of enrolled students, 94% of whom indicated that EBCE is a worthwhile program; and the community as represented by the project's advisory committee and the cooperating resource persons who accurately view their role as assisting students in obtaining a clearer picture of the work world and in making career decisions.

III. SPECIFIC EVALUATION QUESTIONS--RESULTS AND DISCUSSION

The three-year evaluation plan defines twelve specific evaluation questions which address the project's development and outcome obligations as defined in the CEB funding proposal and through the Federal Rules and Regulations under which the project operates. The available evidence relating to each of the twelve evaluation questions is presented and discussed below.

1. HOW DO PROJECT STRATEGIES AND PROCESS COMPARE TO THE STIPULATIONS OF THE FUNDING PROPOSAL?

In the funding proposal there are identified twenty-six specific functions which the project is obligated to fulfill. Those functions which are appropriate to the project's first year of operation all have been fulfilled by the project. A brief discussion of each of the twenty-six functions from the funding proposal follows.

1. Director hired and staff reviewed.

Upon receipt of funding notification in mid-September, 1976, the project director was hired and a review of staff needs commenced immediately. The project director also prepared the funding proposal so that there was no delay in implementing the initial steps of project organization.

2. Staff hired

The project's assistant director who also serves as a learning coordinator (LC) joined the staff almost simultaneously with the project director in September, 1977. On November 1, 1976, a second LC was hired, participated in the week-long AEL training session, and resigned on November 18, 1976. A replacement for this position was hired on December 1, 1976, and participated in the AEL-training session. During this same period a site coordinator (part time) and project secretary joined the staff. The project secretary also served as an LC of business courses which were offered by the program. In June, 1977, an additional LC position was filled bringing the project to its full staff complement.

The staffing pattern as the project enters its second operational year will be:

- a. Project Director
- b. Assistant Director and LC
- c. Two Learning Coordinators
- d. Site Coordinator (part time) and
- e. Project Secretary

The project director, assistant director, and one of the LCs are well-qualified counselors and as required fulfill that role within the program.

3. Coordinate transportation

The project has leased a single school bus which is maintained by S.A.D. 51 for the transportation of EBCE students. However, almost half of the twenty-eight students enrolled during the project's first semester of serving students provided their own transportation to their sites. The use of a single vehicle for the transport of students does seem to engender an unnecessary degree of rigidity. It is suggested that the project staff may wish to consider obtaining the use of a second vehicle toward the end of obtaining the greatest possible flexibility for student transportation before the fall semester begins.

It is the project director's stated purpose to have students assume the primary responsibility for their transportation schedules. NED endorses this strategy for encouraging student independence and responsibility.

4. Organize office and order materials

The project office was fully operational by the time of NED's first site visit on October 8, 1976. Throughout the year there has been an on-going refurbishing and expanding of the project facilities. These activities are scheduled to continue during the summer of 1977 and it is anticipated that the project will start its second year with fully adequate facilities.

Since the beginning, the project has maintained complete documentation of its activities. The filing system, however, was such that this documentation was not always as readily available as the project director desired. Therefore, in June, 1977, the project's filing system was completely revised and a cross-referencing system was established.

5. EBCE orientation to GHS faculty

Since November, 1976, the EBCE project director and staff have made formal and informal orientation/informational presentations to the Greely High School faculty members. A November workshop involved the GHS faculty in curriculum review and development. As late as February 7, 1977, the project director met with the GHS department heads for the purpose of clarifying EBCE purposes and procedures.

6. Staff training and development

All of the project staff for both the 1976-77 and 1977-78 years as well as three of the NED staff have participated in AEL-training sessions at either AEL's Charleston, West Virginia, headquarters or at the project's Cumberland Center site.

7. Site analysis

Site analysis is an on-going process. By April 25, 1977, the project had 52 sites developed and active which was a sufficient number to serve the EBCE students enrolled at the time. By June 30, 1977, there were 77 sites active and it is anticipated that 101 sites will be active by September 1, 1977.

8. Curriculum development and review

The project's curriculum development and review efforts are also discussed in response to evaluation question 2 later in this report. Suffice it at this point to record that a review of the AEL curriculum commenced on November 20, 1976. This Saturday session was led by an AEL staff member and involved the EBCE staff, a NED staffer, and representatives of the various GHS departments. Curriculum review, revision, and development have been and are anticipated to remain a continuing process. During the current year the project has developed and offered EBCE courses in physical education, art, typing and shorthand.

9. Purchase resource materials

Throughout the year the project has continually added to its supply of resource materials for use by the students and LCs. As required or desirable materials have been identified they have been purchased. It is anticipated, however, as discussed under evaluation question 2 that as the project moves toward a more individualized approach, that a greater diversity of available materials will be required. Also, because the EBCE students represent a variety of achievement levels, the project staff will find it desirable to seek a range of materials which treat similar topics and concepts at different levels of difficulty and reading.

10. Advisory Committee meeting

The funding proposal called for the Advisory Committee to be organized and the first of three sessions to be held in October, 1977. However, the funding proposal also assumed an August, 1976, start date. In reality the start date was fifty days later and it therefore was impossible to meet the October deadline. The Advisory Committee with a wide range representation was organized and the other two scheduled meetings were held in January and June of 1977, thereby fulfilling the project's obligations under this function. The composition of the Advisory Committee and the business of the two meetings are addressed more specifically in the project director's quarterly and interim reports.

11. EBCE Newsletter

In the funding proposal, the project indicated the intention to issue monthly newsletters October, 1976, through June, 1977. Since there is no lack of career education newsletters this function was revised by the project staff in two ways. First, newsletters will be developed and issued occasionally and only as warranted by events. Second, newsletters will be student products. One student-developed newsletter was produced and distributed in June, 1977. In NED's judgement using the newsletter to provide learning experiences for students and issuing project newsletters only when there are worthwhile statements to be made is a sane approach. That only one project-developed newsletter was issued during the year in no way should be construed as a lack of effort to publicize the project and its program. For example, the project director was interviewed for ten minutes on commercial television on August 13, 1977. The S.A.D. #51's Superintendent's Newsletter and local newspapers have carried articles detailing the EBCE philosophy and program. These efforts are documented in the project director's quarterly and interim reports.

12. High School faculty curriculum workshops

The funding proposal called for Greely High School faculty workshops to be held in the months of November, 1976, through March, 1977, involving a different instructional area each month. The first workshop was held on November 20, 1976, and involved all instructional areas negating the need for monthly meetings. Furthermore, the project director and LC's have continued throughout the year to obtain the advice and counsel of GHS staff members regarding curricular matters.

13. Student selection criteria finalized with high school faculty

Criteria for selecting students to participate in the EBCE program were established on schedule in November, 1976, and were utilized in selecting EBCE students for the 1977 and the 1977-78 programs. The criteria established for student selection into the program focus on:

- a. the student's ability to work without direct supervision;
- b. the student's attendance record; and
- c. the student's ability to benefit from an experience-based program.

13. (continued)

- 14. EBCE Orientation for GHS Students
- 15. Student Registration

Recommendations concerning the students in relation to the three criteria are sought from GHS staff. The final admissions decision, however, is made by project staff after a review of all information available for each student. At this time, the GHS staff recommendations are considered along with all other information available to the EBCE staff which has been obtained through such as student and parent interviews.

The orientation of GHS students to the EBCE Program was accomplished on schedule in December, 1976, as an initial step in the project's recruiting efforts. In addition, during May-June, 1977, the students at neighboring Yarmouth High School were provided an orientation to the EBCE Program.

As a result of these efforts twenty-eight GHS students were recruited to participate in the project's first semester. To date, ten of the twenty-eight students who participated in the EBCE's first semester program also elected to participate in the 1977-78 program. Seventeen other GHS and two YHS students have registered for the 1977-78 program so the project will start its second semester of serving students with an enrollment of twenty-nine.

The initial enrollment for 1977-78 is somewhat less than was planned in the funding proposal. As discussed in the project director's third quarter report, the original estimate was 10% of the 9-12 GHS enrollment whereas it should have been based on 10% of the 11-12 enrollment. The EBCE 1977-78 enrollment does represent approximately 10% of the 11-12 grade enrollments for GHS.

- 16. EBCE staff inservice for sex-fair guidance

The project director scheduled a January inservice session for his staff but inclement weather forced cancellation of that session and repeated attempts to reschedule this session were not successful. The project director, however, does plan to work with the newly appointed director of women's rights in the State Department and is currently in the process of negotiating to conduct a joint workshop with the state for the EBCE staff and educators from the Cumberland area.

16. (continued)

It should be noted, however, that the intent of this function is ultimately to provide the EBCE students with experiences which are free from sex stereotyping and sex bias. Documentation that the EBCE staff are providing such experiences is found in the fact that fourteen (11%) of the 126 student placements which were made during the first semester of operation put students into non-traditional placements which are summarized in Table I below:

TABLE I
EBCE Non-Traditional Placements
February 1977-June 1977

<u>SEX</u>	<u>SITE</u>	<u>JOB TITLE</u>	<u>DURATION</u>	
Male	Cumberland Elementary School PE Department	Early elementary PE teacher	3/31/77	4/1/77
Female	Goodall Nursery	Grounds person	5/16/77	5/20/77
Female	Maine Audubon Society	Grounds maintenance	5/ 9/77	5/13/77
Female	Maine Audubon Society	Grounds maintenance	5/16/77	5/20/77
Female	Oakhurst Dairy	Chemist	5/31/77	6/10/77
Female	Oakhurst Dairy	Truck driver	5/26/77	6/10/77
Female	Portland Pottery and Supply	Stock person	2/ 7/77	3/ 4/77
Female	Portland Pottery and Supply	Stock person	3/21/77	4/ 8/77
Female	Ron's Getty	Service station attendant	2/ 7/77	2/11/77
Female	Ron's Getty	Service station attendant	5/16/77	5/20/77
Female	WCSH-TV	Anchor person/reporter	2/ 7/77	2/18/77
Female	WCSH-TV	Anchor person/reporter	4/25/77	5/20/77
Female	WCSH-TV	Anchor person/reporter	5/23/77	6/10/77
Female	WCSH-TV	Studio engineer	2/ 7/77	2/18/77

It is NED's understanding that as the project develops additional sites, every effort will be made to increase both the number and the proportion of placements for students, male and female, in non-traditional occupations.

17. EBCE students begin program

In spite of the delayed start date noted above, the project was on schedule with the delivery of services to students. During the week of January 31, 1977, twenty-eight students participated in the EBCE week-long orientation and on February 7 students reported for their first site assignments.

18. Technical assistance from AEL

During September, 1976, two NED staff members worked with Joe Shively and Karen Pfiffner at the AEL site so that planning for the program evaluation could commence without delay. The project director also visited the AEL site in September for the purpose of defining the services AEL was to provide to the project.

In October, 1976, Ms. Pfiffner worked with the staff at the project site so that site analyses could begin.

During November, 1976, three project staff members and two NED staff participated in a week-long training session at the AEL site. Also in November, Ms. Pfiffner came to Maine to assist the project staff with the initial orientation session for the GHS faculty.

In December, 1977, another project staff member participated in the week-long training session at the AEL site.

AEL representative, Chris Lewis, provided technical assistance to the project for the student orientation during the week of January 31, 1977.

In March, 1977, Ms. Pfiffner again returned to Cumberland to aid the project staff in a review of the extent to which the project was maintaining the fidelity of the AEL EBCE model.

Ms. Pfiffner returned to the project site once again during the week of June 27 to assist the project staff during the four-day dissemination workshop.

Finally, the project director, assistant director, and LCs, participated in a Kansas City meeting of all EBCE Programs utilizing the AEL models and sponsored by AEL.

19. Interim reports

An interim report is scheduled for February of each year. This report was replaced by the project quarterly reports. All quarterly reports were issued and are summarized in the project director's year-end report.

20. Slide tape inservice orientation

Up to this point in time, the project has utilized the AEL-prepared slide tape presentation which provides an overview of the AEL-EBCE philosophy and program. While the AEL-prepared presentation is a good one, the project staff feels that a presentation which focuses specifically on EBCE in Cumberland would have impact for its basically non-urban service area. In the funding proposal such a presentation was scheduled to be developed during July and August, 1977. In July, 1977, the script for such a presentation was being developed. NED believes there is merit to a locally-developed presentation but reminds the project to consult the rules and regulations governing the project relative to developing audio-visual materials.

21. Planning for summer workshops

Under the stipulations of the funding rules and regulations the project is not obligated to become involved in dissemination activities until its third year of funding. Nevertheless, in its funding proposal the project did obligate itself to start dissemination activities with an August, 1977, workshop. This workshop was planned and offered ahead of schedule during the week of June 27. A NED staff member attended this workshop as a participant and found it to be a high-quality experience which is substantiated by the summary of the feedback forms presented under evaluation question 12.

Nine individuals participated in the first day sessions which were intended to provide a general overview of EBCE. The total participation in the four-day workshop was less than anticipated. As late as the Thursday prior to the workshop 15 individuals had indicated their intention to participate.

22. Student Evaluation

NED developed and the project director reviewed and approved a three-year evaluation plan for the project which includes questions focused on student evaluation in several of its components and which are discussed in detail in subsequent sections of this report.

23. Final Report

The first-year report is not scheduled to be released until September, 1977.

24. Program Evaluation

See comments under 22 above. Evaluation activities are on schedule and this report will be available for the project staff to work with during August, September, and October as called for in the funding proposal.

25. Visits to EBCE sites

All EBCE sites at which students are placed are visited weekly by either an LC or the site coordinator as stipulated in the funding proposal. The purposes of these visits are to monitor student progress and the experiences being provided by the site as well as to maintain open communication between the project and the site personnel.

26. Technical assistance to summer workshop participants

The June workshop represented the first step in the project's formal outreach effort although the project has hosted visitors since January, 1977. Technical assistance from the project staff to summer workshop participants and visits to fledgling EBCE sites in Maine represent the second and third steps in the project's outreach program. The funding proposal, however, does not call for either of these functions to commence prior to August, 1977.

2. WHICH ACADEMIC AND CAREER CONCEPTS ARE LEARNED THROUGH SITE EXPERIENCES AND WHICH REQUIRE HEAVY RELIANCE ON MORE TRADITIONAL LEARNING METHODS?

A NED staff member reviewed the Student Activity Sheets (SAS) for a randomly selected 50% sample of the CEB students. The SAS review and discussions with LCs indicated that the student assignments were not interdisciplinary in nature, were only minimally individualized, and generally did not utilize the site placements directly as a part of formal instruction although they did appear to meet AEL requirements on these dimensions.

In an attempt to establish a base of acceptance for the EBCE program by the GHS faculty, the project elected to follow the GHS curriculum and instructional program by offering EBCE students the same course titles as are available at the high school. During the current year elective career education credits were not available at the high school and so they were not available to EBCE students. Because of the uniqueness of the EBCE model, this now is recognized as a less than desirable approach and commencing in September the EBCE program will offer career education credits and will adopt the AEL interdisciplinary approach more fully utilizing the site experiences as an integral part of the student's total learning experience.

Operationally, what has occurred during the project's first semester has been to provide students with traditional GHS course titles through the application of the inquiry method and utilizing a variety of resources coordinated by the LC. It is anticipated, however, as the project moves toward an approach more closely resembling the AEL model, the SASs will become interdisciplinary and assignments will utilize the site experiences to teach academic and career concepts.

7. WHAT TYPE OF STUDENT IS ATTRACTED TO EBCE?

(This evaluation question is presented out of sequence)

This area of investigation was planned to serve dual purposes: (1) to draw a profile of this year's EBCE class and (2) to test several hypotheses concerning factors which distinguish EBCE applicants from non-applicants. Definitive answers to this evaluation question would provide insight into the program's image as seen by the GHS student body and therefore would have implications for recruitment strategies. Also, we hoped to better define the traits of students who feel a need for an alternative high school curriculum such as EBCE. Although it is generally agreed that EBCE is not for all students, NED is aware of no satisfactory explanation of who it is and is not for, with the exception of AEL's observation that EBCE attracts few social leaders (class presidents, cheerleaders, etc.)--an observation that was not valid for CER.

Since no selection among applicants was necessary this year, the data below constitutes a profile of GHS students attracted to the program as well as of the 28-member EBCE class:

	<u>Number</u>	<u>Percent</u>
Sex:		
female	18	64%
male	10	36%
Race:		
white	28	100%
Grade level:		
9th	2	7%
10th	1	4%
11th	12	43%
12th	13	46%

Note: The 9th and 10th graders were grade level repeaters.

	<u>Number</u>	<u>Percent</u>
Age (as of 1/31/77):		
16	8	29%
17	12	43%
18	8	29%

Academic Achievement Level (expressed as grade equivalent scores on the CTBS pre-test administered in early February and discussed under evaluation question 3).

	<u>Range</u>	<u>Mean</u>
Total Reading	5.5 - 13.6	12.3
Total Language	3.8 - 13.6	11.6
Total Math	6.0 - 13.6	10.8

Notes: 13.6 is the ceiling grade equivalent on the CTBS. The students' mean grade level on the test date was 11.8.

Reasons for applying to the program (by student report on a questionnaire administered in June and discussed under evaluation question 8).

	<u>Number</u>	<u>Percent</u>
I wanted to learn more about careers.	15	68%
I wanted to see what it was like in the world of work.	13	59%
I wanted to get away from the regular high school program.	11	50%
I thought it would be easier than the regular program.	5	23%
I didn't like the competitiveness of the regular program.	3	14%
Other	3	14%
--I wanted to find out more about my interests.		
--I wanted the experience of meeting more and different people.		
--I had taken most of the courses at Greely and there was nothing left for me but courses I didn't really want.		

One of the two comparison groups involved in student impact evaluation was drawn from GHS students who did not apply for the program. Each student in this group (CG) was chosen to match an EBCE student (CEB) in terms of grade level, sex, and approximate grade point average and course enrollment history. Several hypotheses were tested concerning the factors distinguishing CEB from CG in spite of the two groups' similarities on these dimensions. A questionnaire administered to all 28 students in both groups at the time of pre-testing in February, provided most of the data for this purpose.

The first hypothesis was that EBCE applicants would be less certain of their career plans than others:

	<u>CEB</u>	<u>CG</u>
Do you know what you will be doing a year from now?		
Yes. I have firm plans	6	8
I have an idea of what I'll be doing but it's not certain	15	16
No	7	3
No answer	0	1
Do you know what kind of work you want to be doing in ten years from now?		
Yes. I know exactly what I want to do	7	6
I have several things in mind but I haven't decided for sure	17	13
There are some things I know I DON'T want to do, but		
I haven't decided what I DO want to do	1	6
No. I have no idea	3	3
What grade were you in when you made your present career plans?		
Since I don't have any plans for the future I can't say	5	6
Median answer of those students who did not choose the response above.	8.75	10.29
About how many times in the last three years have you changed your mind about what you want to do in your adult years?		
none	5	9
once or twice	15	14
three or four times	8	3
more than four times	0	1
no answer	0	1

Chi-square analyses of the multiple-choice questions above confirmed the apparent similarity of the two groups' response patterns.* However, a median test of the grade level at which present career plans were made indicates that CEB students tended to be significantly younger than CG students and therefore had maintained their career interest for a longer period of time. ($\chi^2 (1) = 3.94$, $p < .05$, 2-tailed). Therefore, the hypothesis that EBCE applicants would be less certain of their career plans than a non-applicant group of the same sex, grade level, and academic history was not substantiated and there is some evidence that the opposite may be true.

* Non-respondents were excluded from these analyses. The last two categories of the last question were combined. The second question could not meet the chi-square's lower limit on expected frequencies and was not analyzed.

Because half of the EBCE students indicated a desire to get away from the regular high school program as one reason for their application to EBCE, another hypothesis was that EBCE applicants' general affect for school is lower than comparison students'. However, no significant differences were found between CEB and CG on the pre-test of the Attitudes Toward School scale of the Career Orientation Battery discussed under evaluation question 4. On the other hand, the scale is designed to measure perceived relevance of school learning more than feelings about being in school, so the several items of the latter type were investigated for between-group differences (School work is more trouble than it's worth; Most of my courses in school are fairly interesting; I want to drop out of school.) Chi-square analyses of these agree-disagree items revealed no significant differences in CEB and CG's response patterns.

Extracurricular activities also were investigated to determine whether EBCE applicants are less inclined to participate. Students were asked to list their 1975-76 extracurricular activities; the median number was 1.00 for both CEB and CG. The median numbers of 1976-77 activities were also remarkably similar for CEB and CG (1.0 and 1.2, respectively.) It is interesting that in spite of AEL's observations of the types of students who choose to enroll in EBCE, the junior class president of GHS was among this year's enrollees.

The final hypothesis was that EBCE applicants would have more work experience than their colleagues. This hypothesis was supported; the median number of jobs CEB students have held since entering high school is 1.88, vs. CG's .93. A median test confirmed the statistical significance of the difference ($\chi^2 (1) = 8.55, p < .01$, 2-tailed), leading us to speculate that EBCE applicants tend to be more experienced with the work world, to feel more comfortable in it, and to be more employment-oriented than non-applicants who are otherwise similar to them.

On the basis of the first year's experiences, it also is hypothesized that CEB students feel they have greater internal control over their lives (locus of control), are more comfortable with and better able to deal with adult independence, and are more apt to take risks than their counterparts in the comparison groups. NED shortly will suggest several modifications to the three-year evaluation plan which will provide for testing these hypotheses.

In conclusion, the EBCE group was composed mostly of juniors and seniors representing a broad range of academic achievement but with slightly above-average reading skills and below-average mathematical skills. The only factor which clearly distinguishes them from non-applicants is a relatively extensive employment history.

3. HOW DOES THE ACADEMIC ACHIEVEMENT OF EBCE STUDENTS COMPARE WITH THAT OF STUDENTS IN MORE TRADITIONAL HIGH SCHOOL PROGRAM?

The research hypothesis was that students' academic achievement at the termination of the EBCE program would be equivalent to that of students in comparison groups. NED is well aware that no research design can substantiate an inference of no differences, but an absence of measurable differences was accepted as the best possible evidence that the groups' achievement is equivalent.

The evaluation groups were as follows:

CEB--All 28 enrollees in the EBCE program. As indicated earlier, these students span grades 9 to 12.

CG--28 Greely High School students, each matched to an EB student by the Guidance Director in terms of grade level, sex, and approximate GPA and course enrollment history.

CY--28 Yarmouth High School students, chosen in the same manner as the CG group.

The rationale for including a second comparison group from Yarmouth High School in the evaluation design were 1) to control for the school-based career education expected to take place at GHS by including YHS students who do not receive this exposure and 2) to control for the factors entering into the decision to apply to the EBCE program by drawing CY from YHS students who "volunteer" for EBCE in a simulated recruitment situation. However, neither of these rationales turned out to be relevant, as the career education activity for the CG was minimal and plans for a simulated recruitment campaign at YHS were never carried out because it was felt that such a campaign would be unfair to the YHS students.

In accordance with the precedent set by NIE's EBCE evaluation model, the Comprehensive Test of Basic Skills (CTBS), Level 4, Form 5, was used to measure academic skills achievement. Seven of the CTBS scales were administered during the period of mid- to late February and again during the last week of May and first week of June. The testing situations were not constant across students and administration dates; due to logistical problems, the size of testing groups, the test administrator, the setting, and the time allowed for completion all varied somewhat. In order to compensate partially for these extraneous factors, and because the CTBS is not intended as a timed test, students were eliminated from the analyses of any scale on which more than 10 percent of the items were left blank.

The number of students who were tested on both occasions was less than the total number in each of the groups: CEB-27; CG-21; CY-24. The *N*'s associated with the analyses of each scale are smaller than these in some cases, as both pre- and post-test scores were needed for a student to be included in any of the analyses applied to the scale.

The analysis of covariance model was used to test post-test differences among the three groups while accounting for random pre-test differences. Since the analysis of covariance assumes that the three evaluation groups were drawn from the same pre-treatment populations, between-group differences on the pre-test were tested via the one-way analysis of variance. No significant differences were found on any of the seven scales ($\alpha = .1$), indicating that both comparison groups were adequately similar to EBCE students on the dimensions tapped by the CTBS, even after some students were eliminated from analyses due to missing scores.

Pre- and post-test results are summarized in Table II and complete analysis of covariance tables appear in Table III. On the math computations scale the program effect achieved the .1 significance level, indicating a greater-than-random group differences on the post-test in spite of the groups' equivalence on the pre-test. The largest adjusted post-test mean was that of the EBCE students. Therefore, Dunnett's multiple comparison test was applied to determine which of the comparison groups were out-performed by CEB. A difference between adjusted post-test means of at least 3.17 was required to demonstrate CEB's superiority over CG in a two-tailed test at the .1 probability level; the actual difference was 3.41, confirming that CEB's measured math computation skills were significantly greater than CG's at the close of the school year. The difference of 3.05 between CEB's and CY's adjusted means required to demonstrate significant difference between these two groups was not achieved. It should be noted that the CEB-CG difference was not so much the result of dramatic improvements in the CEB group as of a decline in the CG group's scores.

Table II: Summary of CTBS Results
(Raw Scores)

Scale	Group	N	Means				Standard Deviations		Significance Level of F
			Pre-test	Post test	Raw Gain	Adjusted Post	Pre	Post	
Reading Vocabulary (40 items)	EB	27	28.48	28.67	.19	29.52	8.51	7.69	NS
	CG	21	29.67	29.43	.24	29.26	8.43	8.20	
	CY	23	30.44	31.61	1.17	30.78	6.35	7.36	
Reading Comprehension (45 items)	EB	27	32.63	32.52	- .11	33.38	7.33	8.95	NS
	CG	18	33.33	33.06	- .27	33.27	6.70	8.63	
	CY	23	34.87	33.74	- 1.13	32.55	5.97	5.92	
Spelling (30 items)	EB	25	22.48	22.00	- .48	21.61	6.20	6.38	NS
	CG	21	20.86	21.67	.81	22.52	6.52	5.30	
	CY	23	22.44	22.70	.26	22.34	4.03	4.92	
Language Mechanics (20 items)	EB	25	14.64	15.56	.92	15.71	3.70	3.75	NS
	CG	21	14.71	15.48	.77	15.57	3.20	3.30	
	CY	24	15.21	16.33	1.12	16.09	2.60	2.12	
Language Expression (35 items)	EB	25	23.64	23.60	- .04	24.07	5.82	6.98	NS
	CG	21	23.10	22.95	- .15	23.85	6.06	6.61	
	CY	24	25.54	25.04	- .50	23.68	4.41	5.17	
Math Computations (48 items)	EB	25	33.28	34.32	1.04	36.41	9.47	10.12	.10
	CG	20	36.15	33.45	- 2.70	33.01	8.55	9.97	
	CY	23	37.78	37.70	- .08	35.82	6.39	6.49	
Math Concepts and Applications (50 items)	EB	25	31.88	30.44	- 1.44	32.05	10.01	11.58	NS
	CG	19	32.21	31.47	- .74	30.61	10.71	12.15	
	CY	22	36.68	35.91	- .77	33.52	8.53	8.80	

Table III: CTBS Analysis of Covariance Summary

Scale	Source of Variance	df	MS	F	p
Reading Vocabulary	Pre-test	1	3208.32	223.64	.001
	Program	2	14.90	1.04	NS
	Error	67	14.35		
	Total	70	59.99		
Reading Comprehension	Pre-test	1	2486.50	108.20	.001
	Program	2	4.72	.21	NS
	Error	64	22.98		
	Total	67	59.20		
Spelling	Pre-test	1	1257.50	102.75	.001
	Program	2	5.39	.44	NS
	Error	65	12.24		
	Total	68	30.35		
Language Mechanics	Pre-test	1	338.42	68.21	.001
	Program	2	1.65	.33	NS
	Error	66	4.96		
	Total	69	9.70		
Language Expression	Pre-test	1	1871.03	147.12	.001
	Program	2	.97	.08	NS
	Error	66	12.72		
	Total	69	39.31		
Math Computations	Pre-test	1	3497.20	119.21	.001
	Program	2	70.21	2.39	.10
	Error	64	29.34		
	Total	67	82.32		
Math Concepts and Applications	Pre-test	1	5873.39	174.17	.001
	Program	2	19.45	.58	NS
	Error	62	33.72		
	Total	65	123.12		

The results of the other six scales provide no reason to reject the hypothesis that EBCE and traditional high school programs are equally effective in developing or maintaining students' basic skills.

4. HOW DO EBCE STUDENTS COMPARE WITH OTHERS ON THE ATTAINMENT OF CAREER EDUCATION KNOWLEDGE, ATTITUDES, AND SKILLS?

It was hypothesized that EBCE would positively impact students with respect to career education objectives. Two career education tests with a total of 13 scales were employed; the Career Orientation Battery (COB) was used in the same pre-post with comparison group design as the CTBS and the Career Maturity Inventory (CMI) was administered only to EBCE students on a pre-post without comparison group basis.

NED began the development of the Career Orientation Battery in 1974 and found it sensitive to career education instruction when used in the evaluation of three school-based career education projects, including Project GIVE in Cumberland Center. COB Form 912 was revised in the fall of 1976 to conform with the objectives of EBCE and the CEB staff approved it as consistent with the thrust of their efforts. The COB consists entirely of multiple-choice questions and contains eight scales which are described in terms of the attributes they measure in Table IV. The eighth scale, Job-Seeking Skills, was not included on the pre-test but was administered to all three groups on the post-test.

The three evaluation groups (CEB, CG, and CY) and test administration were the same as for the CTBS and are described under question 3. Also, scores on a scale were coded as missing if more than 10 percent of the scale's items were omitted and students were eliminated from all analyses of any scale for which either the pre- or post-score was missing. The number of students who were administered the COB on both occasions were: CEB-26; CG-20; CY-23.

The one-way analysis of variance was applied to pre-test scores on the seven scales included on the COB pre-test. On the Attitudes toward School scale significant differences were found, $F(2.66) = 5.72$, $p < .005$. Dunnett's two-tailed test of multiple comparisons revealed that CY scored significantly higher than CEB at the .05 probability level, but that the small difference in the mean scores of CEB and CG was not significant. Therefore, CY was eliminated from the analysis of covariance applied to that scale. No significant differences were found among the three groups' pre-test means on the other scales ($\alpha = .1$).

Analysis of covariance results indicated no significant differences among groups on any of the first seven COB scales ($\alpha = .1$). Results of the Job-Seeking scale, for which there were no pre-test scores, were analyzed with the one-way analysis of variance and again, differences among the three groups were found insignificant.

The COB scores of the EBCE students were also subjected to one-tailed t -tests for correlated samples as a secondary analysis whose main purpose was to test the COB's sensitivity to instruction with respect to the CMI's. Two of the seven t 's were significant at the .05 level (Career Planning and Specific Occupational Information), indicating that EBCE students' skills in these two areas improved during the course of their EBCE experience. Nonetheless, this improvement cannot be attributed to the EBCE program in light of the analysis of covariance results.

The competence test of the Career Maturity Inventory published by CTB/McGraw Hill was also used in conjunction with this evaluation question because of its wide acceptance, as witnessed by its application to NIE/EBCE model programs. However, the 2½ hours required for administration of the CMI made it unfeasible to test the comparison groups. All EBCE students completed all sections of the CMI on the pre-test but at the year's end only 17 of the 28 EBCE students took the post-test. The pre- and post-tests of these students were checked for missing scores (defined as before as more than 10 percent non-responses), but there were none.

In NED's judgement, the dimensions measured by the CMI competence test scales are as follows:

- Part 1. Self Appraisal--The ability to draw conclusions about an individual and/or his/her appropriate career direction based upon behavioral information about the person.
- Part 2. Occupational Information--The ability to identify an individual's job title on the basis of a scenario of a segment of his/her work day.
- Part 3. Goal Selection--The ability to choose among several alternatives the occupation most appropriate for an individual whose interests and abilities are given.
- Part 4. Planning--Knowledge of the sequence of the steps involved in preparing for various occupations.
- Part 5. Problem Solving--The ability to identify appropriate means of overcoming career path obstacles.

As shown in Table VI, one-tailed t-tests for correlated samples revealed no significant growth on any of the CMI scales during EBCE enrollment.

In conclusion, there is no compelling evidence that the EBCE program affected any of 13 dimensions of career education knowledge, skills, and attitudes assessed. These results may reflect the lack of emphasis on career education instruction in this year's CEB program and also demonstrate that contact with the work world in itself does not result in the achievement of career education objectives. It is also possible that the time span between test administrations was insufficient for measurable growth to occur.

5. WHAT IS THE EFFECT OF EBCE UPON LONG-TERM RETENTION OF ACADEMIC LEARNING?

It is hypothesized that more academic course content is retained on a long-term basis by EBCE students than by students who learn in the traditional classroom setting. This question, however, will be viewed only once during the program's funded life in order to provide enough of a time lapse to occur to justify the assessment of "long-term" retention.

6. WHAT BECOMES OF EBCE STUDENTS AFTER THEY LEAVE THE PROGRAM?

Data collection for this question will not begin until late fall, 1977.

Table IV: Summary of COB Results
(Raw Scores)

Scale	Group	N	Means				Standard Deviations		Significance Levels	
			Pre-test	Post test	Raw Gain	Adjusted Post	Pre	Post	F	t
<i>Career Planning:</i>										
Students will recognize the importance of career planning, view career planning as a life-long process, and be able to identify the relative importance which should be placed on various factors in making career decisions. (21 items)	EB	26	13.42	15.19	1.77	15.28	4.67	2.81	NS	.04
	CG	20	13.75	15.10	1.35	15.11	2.40	3.27		
	CY	23	14.17	15.17	1.00	15.07	2.59	2.19		
<i>Work Behavior:</i>										
Students will be able to identify appropriate responses to situations faced in work settings that require skills in interpersonal relations. (11 items)	EB	26	6.69	6.69	.00	6.80	2.31	2.24	NS	NS
	CG	20	7.65	6.95	.70	6.89	1.27	1.64		
	CY	23	7.61	7.65	.04	7.59	1.62	1.03		
<i>Attitudes toward School:</i>										
Students will possess positive attitudes about school and school achievement and will view school learning experiences as relevant to adult life. (12 items)	EB	26	8.04	8.65	.61	8.81	3.18	3.29	NS	NS
	CG	20	8.80	8.90	.10	8.69	2.21	2.34		
	CY	23	10.39				1.56			

Table IV: Summary of COB Results (cont.)

(Raw Scores)

			Means				Standard Deviations		Significance Levels	
Scale	Group	N	Pre-test	Post test	Raw Gain	Adjusted Post	Pre	Post	F	t
<i>General Occupational Information:</i>										
Students will possess basic knowledge about employment, such as employment related laws and the reasons for various methods and amounts of payment. (21 items)	EB	26	14.04	14.85	.81	14.94	4.56	2.89	NS	NS
	CG	20	15.35	14.90	-.45	14.78	2.39	2.83		
	CY	23	14.56	14.35	-.21	14.36	2.57	2.46		
<i>Attitudes toward Work:</i>										
Students will desire to work and will possess attitudes which are likely to facilitate adjustment to and success in employment settings. (18 items)	EB	26	12.54	13.50	.96	13.66	4.07	1.82	NS	NS
	CG	20	14.00	14.20	.20	14.12	2.43	2.67		
	CY	23	14.22	14.30	.08	14.19	1.59	2.16		
<i>Specific Occupational Information:</i>										
Students will be aware of a variety of occupations in terms of workers' training requirements, pay, personality factors, interests, and abilities. (50 items)	EB	25	33.32	38.36	5.04	38.76	10.93	5.54	NS	.02
	CG	20	37.10	36.75	-.35	36.31	4.48	5.37		
	CY	23	35.30	36.91	1.61	35.87	3.75	3.40		

Table IV : Summary of COB Results (cont.)

(Raw Scores)

			Means							
Scale	Group	N	Pre- test	Post test	Raw Gain	Adjusted Post	Standard Deviations		Significance Levels	
							Pre	Post	F	t
<i>Sex Equity:</i>										
Students will regard gender as irrelevant in matters pertaining to career planning, preparation, and employment. (16 items)	EB	26	11.38	12.23	.85	12.31	4.18	3.05	NS	NS
	CG	20	12.05	12.55	.50	12.29	3.35	2.86		
	CY	23	11.26	11.96	.70	12.09	2.96	2.27		
<i>Job Seeking :</i>										
Students will be knowledgeable about job application procedures and appropriate interview behavior. (18 items)	EB	26		12.09				2.13	NS	
	CG	20		11.53				1.95		
	CY	21		11.95				2.75		

Table V: COB

Analysis of Covariance and t-test Summary

Scale	Source of Variance	df	MS	F	p	t*	df	p
Career Planning	Pre-test	1	48.77	6.92	.01	1.85	25	.04
	Program	2	.30	.04	NS			
	Error	65	7.04					
	Total	68	7.46					
Work Behavior	Pre-test	1	10.33	3.49	.07	.00	25	NS
	Program	2	4.34	1.47	NS			
	Error	65	2.96					
	Total	68	3.11					
Attitudes toward School (CY excluded)	Pre-test	1	82.00	12.07	.001	.88	25	NS
	Program	1	.17	.03	NS			
	Error	43	6.80					
	Total	45	8.32					
General Occupa- tional Information	Pre-test	1	19.86	2.72	NS	.75	25	NS
	Program	2	2.17	.30	NS			
	Error	65	7.30					
	Total	68	7.33					
Attitudes toward Work	Pre-test	1	20.87	4.44	.04	1.07	25	NS
	Program	2	1.92	.41	NS			
	Error	65	4.70					
	Total	68	4.85					
Specific Occu- pational Infor- mation	Pre-test	1	136.88	6.53	.01	2.24	24	.02
	Program	2	36.51	1.74	NS			
	Error	64	20.98					
	Total	67	23.17					

Table V : COB (cont.)

Analysis of Covariance and t-test Summary

Scale	Source of Variance	df	MS	F	p	t*	df	p.
Sex Equity	Pre-test	1	218.17	49.68	.001	1.21	25	NS
	Program	3	.32	.07	NS			
	Error	65	4.39					
	Total	68	7.42					
Job-Seeking Skills	Program	2	1.73	.33	NS	(No pre-test was administered)		
	Error	60	5.33					
	Total	62	5.21					

*One-tailed t for correlated samples, applied to EB group only. Alpha = .05.

Table VI : Summary of CMI t-test Results
(Raw Scores)

Scale	<u>N</u>	Means			Standard Deviations		<u>t</u> *	<u>df</u>	<u>F</u>
		Pre-test	Post test	Raw Gain	Pre-test	Post test			
Part 1. Self Appraisal (20 items)	17	14.65	14.94	.29	2.60	3.21	.36	16	NS
Part 2. Occupational Information (20 items)	17	17.65	18.12	.47	2.15	2.47	1.33	16	NS
Part 3. Goal Selection (20 items)	17	14.76	15.71	.95	2.46	3.85	1.17	16	NS
Part 4. Planning (20 items)	17	15.18	15.24	.06	3.28	4.56	.05	16	NS
Part 5. Problem Solving (20 items)	17	12.18	12.71	.53	2.60	2.78	1.11	16	NS

*One-tailed t for correlated samples. EB group only. Alpha = .05.

8. HOW DO EBCE STUDENTS VIEW THE PROGRAM?

EBCE students were asked to assess the program at the end of the semester by responding to a NED-developed Student Opinionnaire. Twenty-two of the opinionnaires were completed and returned for a return rate of 79%. Following as Table VII is a synopsis of the student's assessment of the EBCE program.

TABLE VII
Student Responses to Questionnaire Items
as Percents of those Responding
(N=22)

1. I choose to go into EBCE because:
68.2% I wanted to learn more about careers.
50.0% I wanted to get away from the regular high school program.
22.7% I thought it would be easier than the regular program.
13.6% I didn't like the competitiveness of the high school program.
59.1% I wanted to see what it was like in the world of work.
13.6% Other:
 --I wanted to find out more about my interests.
 --I wanted the experience of meeting more and different people
 --I had taken most of the courses at Greely and there was nothing left for me to take but courses I didn't really want.
2. I think EBCE should be offered in every high school program throughout the United States.
 81.8% Yes 4.5% No 13.6% Undecided
3. I would recommend EBCE to my friends.
 72.7% Yes 13.6% No 13.6% Undecided
4. I learned a lot of useful things in EBCE that I could not have learned in my regular Greely High School classes.
 100.0% Yes -- No -- Undecided
5. If I had to do it over again, I would participate in the EBCE program.
 50.0% Yes 13.6% No 18.2% Undecided 18.2% I am going to
6. I have learned more about myself through the EBCE program than I would have in the regular program.
 95.4% Yes -- No 4.5% Undecided
7. I feel as though I made better decisions after participating in the EBCE program.
 95.4% Yes -- No 4.5% No answer
8. On the whole, the people at the sites usually treated me:
 9.1% as a guest or tourist
 86.4% as a co-worker
 4.5% as a child
 -- mostly they ignored me

9. I considered myself a student at Greely High School during my participation in the EBCE program.
50.0% Yes 40.9% No 9.1% Undecided
10. I learned as much in my academic subjects in the EBCE program as I would have in the regular program.
77.3% Yes 13.6% No 9.1% Undecided
11. I feel the amount of academic work I did in the EBCE program as compared to the amount I would have done at Greely High School was:
31.8% about the same 50.0% more 18.2% less
12. I feel the difficulty of the academic work I did in the EBCE program as compared to the difficulty of the academic work I did in the first semester at Greely High School was:
59.1% about the same 18.2% more difficult 22.7% less difficult
13. What did you miss most from the Greely High School program by participating in EBCE?
9.1% classes
77.2% friends
4.5% after school activities
9.1% teachers
13.6% nothing
4.5% other:
 --regular classroom work--review of my homework
- * 14. I think EBCE is a good program for:
31.8% all students
50.0% seniors
50.0% juniors
 -- sophomores
 -- freshman
 -- no one
15. I think EBCE is good for:
4.5% good students
9.1% average students
 -- poor students
86.4% all students
 -- no one

*Multiple responses allowed.

A review of the student responses presented in Table VII reveals that the students who participated in S.A.D. 51's EBCE program in general considered it a very positive experience as more than 68% of them indicated that they either would or did elect to participate in the program again. Almost 82% of them responded that EBCE should be offered in every high school in the country and almost 73% of them stated that they would recommend the program to their friends.

EVERY EBCE STUDENT responding to the questionnaire indicated that, "I LEARNED A LOT OF USEFUL THINGS IN EBCE THAT I COULD NOT HAVE LEARNED IN MY REGULAR GREELY HIGH SCHOOL CLASSES." In addition, students responded that they made better decisions as a result of the program (95%) and learned more about themselves than they would have in the regular program (95%).

From the students' viewpoint EBCE provided unique non-academic experiences while at the same time being academically demanding. More than 77% of the responding students felt that the difficult level of the academic work was equal to or greater than what would have been required at Greely High School and that they learned as much in their academic subjects as they would have in the regular program. Almost 82% indicated that the amount of academic work done was about the same (31.8%) or more (50%) than they would have done at Greely High School.

9. HOW DO EBCE STUDENTS' PARENTS VIEW THE PROGRAM?

Those parents who responded to the questionnaire, as can be noted from an inspection of Table VIII were overwhelmingly positive toward the EBCE experience and its impact on their sons and daughters. For example, more than 88% of the responding parents noted positive changes in their children which might have been a result of the EBCE program and more than 94% felt that it was a worthwhile program with less than 6% undecided.

Although more than 77% (See Table VII) of the students indicated they learned as much in their academic subjects as they would have learned in the regular program, only 58.8% of the responding parents held this opinion. Nevertheless, as already noted, when taken in toto parents are apparently giving the EBCE program overwhelming endorsement as more than 88% of them indicate that they would either want their son or daughter to participate in EBCE again or that their son or daughter has already enrolled for a second EBCE experience.

This question was addressed by NED in early June through a mail questionnaire distributed to the parents of the twenty-eight EBCE students. Seventeen completed questionnaires were returned for a 57% return rate and the results are reported below as Table VIII.

TABLE VIII
Parent Responses to Questionnaire Items
as Percents of those Responding

(N=17)

1. Have you received enough information about the nature of your son's/
daughter's EBCE program?
82.3% Yes 11.8% No 5.9% Undecided
2. Do you feel you got enough information about your son's/daughter's progress
in the EBCE program?
82.3% Yes 17.6% No -- Undecided
3. Do you feel that EBCE is a worthwhile program?
94.1% Yes -- No 5.9% Undecided
4. Do you think your son's/daughter's attitude toward school has changed
as a result of the EBCE program?
64.7% Yes 23.5% No 11.8% Undecided
5. Has the EBCE program helped your son/daughter to form career plans?
64.7% Yes 5.9% No 29.4% Undecided
6. Do you think your son/daughter learned a great deal about the work world
in the EBCE program?
82.3% Yes 11.8% No 5.9% Undecided
7. Would you say your son/daughter has learned as much academically in the
EBCE program as he/she would have learned in a regular high school program?
58.8% Yes 23.5% No 17.6% Undecided
8. Have you noticed positive changes in your son/daughter that might be a
result of the EBCE program?
88.2% Yes 11.8% No
9. Have you noticed negative changes in your son/daughter that might be a
result of the EBCE program?
17.6% Yes 82.3% No
10. If you had to do it over again, would you want your son/daughter to
participate in the EBCE program?
76.5% Yes -- No 5.9% Undecided
5.9% no response 11.8% he/she has already enrolled

10. HOW DO PARTICIPATING RESOURCE PERSONS AND SITE COORDINATORS VIEW THE PROGRAM?

On July 12, 1977, a seven item opinionnaire was sent to each of the 74 resource persons who had cooperated with the project during its first semester of operation. Thirty of the resource persons responded to the initial mailing for a 40.5% return rate. A follow-up mailing was released on July 26, 1977, which increased the number of respondents to 48 for a 64.8% return rate. While this return rate is not outstanding, NED considers it an acceptable rate of return given the time of year during which the opinionnaires were distributed and the popularity of July and August as vacation months.

Responses to each of the seven items are summarized in Table IX below and appear to indicate that as a group the resource persons understand the purposes of EBCE (item 1) and endorse it as a viable program. It should be noted here that only four of the area businesses approached to participate in the program declined to do so and none of these refusals represent a negative attitude toward the EBCE program. In three instances the persons being approached indicated that the business was too small and too hectic for the student to benefit from a placement at that site. The fourth refusal was by a newspaper office which was undergoing a complete renovation at the time. It is anticipated that the newspaper office will become an active site once the renovations are completed.

TABLE IX
Responses to Resource Persons Opinionnaire
as a Percent of the Total Responding

(N=48)

- *1. What do you see as the primary intent of the EBCE program at your site?
- 2.1% To train students
 - 60.4% To assist students in making career decisions
 - 37.5% To give students a clearer picture of the work world
 - 2.1% To assist students in seeing the relevancy of school
 - 2.1% Other
 - "To provide a comprehensive education for students."
- *2. Which statement BEST describes the initial deficiencies of the student(s) who visited your site?
- 31.2% They lacked skills needed at the site.
 - 6.2% They had poor work attitudes (concern for the quality of work).
 - 10.4% They had poor work habits (punctual, work with minimal supervision, etc.).
 - 6.2% They had poor social skills (ability to work well with people).
 - 2.1% They did not understand the practical application of school subjects.
 - 25.0% They were well prepared.
 - 22.9% Other
 - The majority of "other" responses represented various combinations of A-F.
 - 2.1% No response
- *3. What major gain do you feel the students made by participating at your site?
- 29.2% Developed skills specific to this site
 - 10.4% Improved work attitudes (concern for quality of work)
 - 10.4% Improved work habits (punctual, work with minimal supervision, etc.)
 - 10.4% Improved social skills (ability to work well with other people).
 - 14.6% Opportunity to practice practical applications of school subjects.
 - 33.3% Other
 - The majority of "other" responses represented various combinations of A-E.

*Multiple responses allowed.

*4. What is your main concern in participating in the EBCE Program?

- 10.4% Taking time out of work days to work with students.
- 52.1% Providing students an opportunity to participate in job tasks which require trained skills.
- 4.2% Inadequate feedback from EBCE staff.
- 6.2% Do not fully understand my role in the program.
- 12.5% None
- 16.7% Other

--The majority of "other" responses represented various combinations of A-E.

*Multiple responses allowed.

5. Did the students interfere with your duties or the operations at the site?

- 41.7% No
- 22.9% Yes, but worth it
- 29.2% Yes, but expected it
- 6.2% Yes, more than expected

6. Overall do you feel the EBCE program is a worthwhile experience for students?

- 81.2% Yes
- 4.2% No
- 14.6% Not sure

7. Overall, do you feel the EBCE program is a worthwhile experience for you?

- 68.7% Yes
- 14.6% No
- 16.7% Not sure

11. WHAT IMPACT DOES THE EBCE PROGRAM HAVE UPON THE SENDING HIGH SCHOOL?

During a January 31--February 9 site visit a NED staff member interviewed GHS administrators and department heads. The results of these interviews are detailed in the site visit report dated February 28, 1977 (Appendix B). Suffice it at this point to note that the GHS faculty is not unanimously supportive of the project's efforts. There is good evidence that the basic concept of EBCE is acceptable to most of the GHS faculty as represented by the school's administrators and department heads. A concept by nature is easier to accept in the abstract and in the early planning stage, than in operation when the full implications of the program and their associated difficulties are faced. Thus, the emergence of conflict at this point in the program's development was predictable and to a degree unavoidable. The project continues to work closely with those GHS faculty who support the program and to keep all GHS faculty apprised of project activities through formal written communications. It must be noted that evaluation results provide no evidence that the four GHS faculty expectations expressed during the interviews have come to pass. These stated expectations were:

1. Whereas some of the EBCE enrollees will benefit from the program, most will not.
2. Students will be shortchanged in terms of academic progress. LCs cannot provide in one day per week, instruction comparable to that received from classroom teachers in five days per week. Some subjects require daily skill practice which the EBCE program will not offer.

3. EBCE is an "easy way out" for students, giving them unfair advantage in competing with regular students for the honor roll and class standing.
4. The students' maturity and ability to do independent study for credit is suspect.

Although it would be folly to contend that each of the twenty-eight students enrolled in EBCE benefited equally from participation in the program, based on the student and parent reports and student interviews it does appear that each of the students did derive benefit from the experience. As noted in NED's June 6, 1977, memorandum, (Appendix B), . . . "the students indicated that the individualized nature of academic instruction in EBCE encouraged them to learn more and to take their course work more seriously and more personally than would be true in a traditional program. They further indicated that because of the program staff's expectations for them, they were better able to handle independence and responsibility. It was interesting to note as an indication of the EBCE students' level of maturity that none of the students interviewed professed to be fully responsible and independent--quite an impressive admission for students in late adolescence." Furthermore, there is no evidence that participation in the EBCE experience was detrimental to the students' academic progress. Indeed, at the beginning of the program there were no significant differences between the EBCE group and either of the comparison groups in academic achievement as measured by standardized tests but the EBCE group did achieve significantly better than the GHS comparison group in mathematics on the post-test. Perhaps it can be hypothesized that there are some distinct advantages to the one-on-one approach to instruction employed by the EBCE program and to the on-site applications of learning as was noted by students during interviews as reported in NED's site reports dated April 29, 1977, and June 6, 1977, (Appendix B).

The CEB's relationship, then, with some of the GHS faculty is described best as tenuous. It is suspected that the alternative nature of CEB may pose some threat to some GHS staff members as it removes students who would otherwise be in their classes. The CEB staff has worked and will continue to work to keep the GHS faculty fully appraised of project activities emphasizing that the program provides an alternative to the traditional program and is for a limited number of students, not a replacement for the regular high school program.

12. WHAT RESULTS FROM PROJECT EFFORTS TO DISSEMINATE EBCE IN MAINE?

The project's first dissemination attempt was offered in the form of a four-day workshop from June 27-30, 1977. Although 15 New England educators indicated an intention to participate in this program, nine participated in the first day which provided an introduction to and an overview of EBCE as practiced in S.A.D. 51. Six individuals representing three school districts and NED participated in the full four days which were designed to sufficiently familiarize the participants with the operational aspects of EBCE that, with additional technical assistance from the project, they could begin to implement an EBCE program in their home districts. For those individuals who participated in the full four days, the workshop appeared to be a worthwhile and rewarding experience (Appendix C) as indicated on a Workshop Feedback Form.

The items on the Feedback Form are intended to serve two purposes, to assess the quality of the workshop and to provide the project staff with information on which to base modifications in workshop procedures. Although there were only six individuals who participated in the four-day session, seven completed Feedback Forms were submitted. Six of the seven respondents indicated that the workshop accomplished its stated objectives well (4) or extremely well (2) while the seventh individual gave the program an average grade. Four of the participants indicated that they received enough information during the four days to begin to replicate the project's program with additional technical assistance. Indeed, two of the respondents stated that they are committed to replicating the project's model in their districts.

The project's current plans call for a second workshop to be offered during the summer of 1978. The project's plans also provide for the delivery of technical assistance to participants in the June, 1977, workshop commencing in August, 1977.

Also scheduled for the fall of 1977 is the presentation of a slide-tape program designed to stimulate interest in and to orient interested school people to the EBCE approach at meetings of professional groups throughout the state. As of July, 1977, the project staff had developed a script outline for this presentation which is scheduled to be completed by September, 1977.

Appendix A
Evaluation Plan.



NED

NEW EDUCATIONAL DIRECTIONS, INC.

a nonprofit service organization

BOX 307 CRAWFORDSVILLE, INDIANA 47933 (317) 362-8877

EVALUATION PLAN FOR CUMBERLAND CENTER EXPERIENCE BASED CAREER EDUCATION

December 1, 1976

Pursuant to its contract with Cumberland Center Experience Based Career Education Program (CEB) to serve as the project's third-party evaluation agency, New Educational Directions (NED) submits the following evaluation plan. The plan is designed to span the full three years of the project's anticipated funding through the U.S. Office of Education.

The first section of the plan enumerates evaluation questions and the strategies for obtaining their answers. Evaluation questions were chosen jointly by NED and CEB with the intent of addressing the priority concerns of the funding agent, the Cumberland Center community, the project staff, and other school districts who in the future may consider adoption or adaptation of the CEB model. As CEB has chosen as its model the experience-based career education programs of the Appalachian Educational Laboratory, AEL's EBCE evaluation design was also given careful consideration in the development of this plan. The plan is designed to serve dual purposes by providing for the project staff's continuous needs for specific feedback concerning their progress and effectiveness while at the same time providing more global information needed by individuals external to the program as well as by those directly involved in CEB.

The second section of the plan is a chronological time schedule for evaluation activities while the third section describes the planned involvement in evaluation of each of several audiences.

QUESTION 1: HOW DO PROJECT STRATEGIES AND PROGRESS COMPARE TO THE STIPULATIONS OF THE FUNDING PROPOSAL?

By December 31, 1976, NED will develop a checklist of milestones and key AEL components on the basis of the CEB proposal timeline and the AEL model. During monthly site visits, NED will review each item with CEB staff. Where deviations from, elaborations of, or additions to original plans are noted, changes and their rationale will be documented. This ongoing documentation will be the primary responsibility of the project director, but NED will also enter into the record comments on significant matters of this nature. Both NED and CEB will maintain current files of memoranda prepared by both parties. The checklist and back-up documentation will serve as a framework for the project's interim and final performance reports.

The checklist and associated monitoring system will also address the stipulations of this evaluation plan. CEB will assume the monitoring role for NED's evaluation activities and NED will take the primary responsibility of documenting and justifying revisions of the evaluation design presented here.

QUESTION 2: WHICH ACADEMIC AND CAREER CONCEPTS ARE LEARNED THROUGH SITE EXPERIENCES AND WHICH REQUIRE HEAVY RELIANCE ON MORE TRADITIONAL LEARNING METHODS?

Student activity sheets will serve as the data base for this evaluation component. Activity sheets include code numbers referencing the sub-concepts for which the activity is designed. Although sub-concepts (e.g., grammar) are inter-disciplinary, they are associated with a concept (e.g., writing) and with a discipline (e.g., English) as seen in the course and interest area matrix.

CEB learning coordinators (LC's) will be responsible for assessing each activity sheet according to the following code:

- 1) Experience site resources are essential to the completion of the activity.
- 2) Learning lab resources or in-house instruction are essential to the completion of the activity.
- 3) Both are essential.

Whether this analysis is accomplished on a continuous basis or periodically will be left to the discretion of LC's. NED will occasionally spot-check the LC's assessments to assure uniform application of the primary learning resource code. Each month the preceding month's activity sheets will be tabulated to show the number of activities corresponding to each sub-concept and the primary learning resource(s) utilized. Summations will be performed across sub-concepts within concepts and across concepts within disciplines. Monthly results will be tabulated annually and included in interim evaluation reports.

During the project's first semester of operation these results will be useful in identifying any needs for more effort in developing activities which capitalize maximally on the resources of experience sites. Later in the project, after LC's are well-experienced in activity sheet development, results will indicate either that 1) experience-site resources are a viable alternative to the exclusive use of school-based resources for learning all sub-concepts of the CEB curriculum or 2) that some sub-concepts require extensive reliance on more traditional learning methods. Should the latter be the case for a large number of sub-concepts within a concept (or within a course), the project will be able to identify courses which should be considered for elimination from EBCE offerings.

QUESTION 3: HOW DOES THE ACADEMIC ACHIEVEMENT OF EBCE STUDENTS COMPARE WITH THAT OF STUDENTS IN MORE TRADITIONAL HIGH SCHOOL PROGRAMS?

In accordance with the precedent set by NIE's EBCE evaluation model, reading comprehension and mathematical skills will be assessed through appropriate scales of the Comprehensive Test of Basic Skills (CTBS). The CTBS language skills test will also be used.

The research hypothesis is that students' academic achievement at the termination of a year-long EBCE program will be equivalent to that of students in comparison groups. NED is well aware that no research design can substantiate an inference of no differences, but an absence of measurable differences will be accepted as the best possible evidence that the groups' achievement is equivalent.

Both comparison groups and the EBCE group will be tested on a pre-post basis. Assuming that no significant differences are found in pre-test means, the significance

of differences in group means of post-test scores will be assessed through the analysis of covariance, where pre-test scores will serve as the covariate. Observed p values of .1 or less will lead to rejection of the research hypothesis of no difference. If differences among the three groups are found, Dunnett's test for multiple comparisons will be applied to determine which comparison group differed from the EBCE group, again using the .1 alpha level.

The following groups will be identified each year:

EB--all EBCE students

CG--an equal number of students from Greeley High School, where some school-based education takes place. Although the statistical design does not call for matched pairs, this group will be selected on a matched-pair basis. That is, another Greeley High School student will be chosen to match each EBCE student in terms of: 1) grade level, 2) sex, 3) curriculum (business, college preparatory, or career), 4) the math and English course in which the student was enrolled the previous year, 5) the grades received in these courses.

CY--an equal number of Yarmouth High School students. Yarmouth is in a neighboring district to S.A.D. 51 and has no career education program. Since the major shortcoming of the CG group is that it does not allow control of the student factors entering into the decision of whether to volunteer for the EBCE program, the CY group will be selected in such a way as to correct this problem, at least in part. Yarmouth High School students will undergo the same recruiting and selection procedures for EBCE as do Greeley students, with the exception that it will be made clear that students are "applying for" a hypothetical program, which is not actually open to them. The only matching of CY students to EBCE students will be in that various grade levels will be equally represented in the two groups.

Since students typically will spend no more than one year in EBCE, student impact evaluation will encompass only one year's growth. Therefore, each year's evaluation will be independent of the other years. Year 2 and 3 test dates will fall in early September and early May. Year one pre-tests will be administered in early January. Only students completing the year-long program (or the semester program the first year) will be included in this evaluation component. Comparison group students with incomplete scores will be excluded from analyses.

It may be possible during the project's final year to use the year two CG and CY groups scores' as a comparison base. This will be done if the CG 1977-78 group's match with EB 1978-79 is acceptable on all factors itemized above, recruitment and selection procedures remain essentially unchanged from year two to year three, and the distribution of grade levels in EB 1978-79 is similar to that of CY 1977-78.

Somewhat unconventionally, this design permits the inclusion of students from different grade levels in a single group. Since enrollment in EBCE is anticipated to be only 25 the first year and is never expected to exceed 60, it is judged that sub-division of EBCE groups would result in too small an n for demonstrating any real differences between treatment and comparison groups. Since comparison and treatment groups' compositions will be equivalent with respect to grade level and since raw, rather than norm-referenced scores will be analyzed, this is seen as no major problem unless diversified grade levels within groups result in very large within-group variances, reducing the power of statistical tests.

QUESTION 4: HOW DO EBCE STUDENTS COMPARE WITH OTHERS ON THE ATTAINMENT OF CAREER EDUCATION KNOWLEDGE, ATTITUDES, AND SKILLS?

It is hypothesized that EBCE students' attainment of career education objectives will be superior to that of comparison groups. The experimental and comparison groups, testing schedule, and research design described under question three will be employed, with the exception that superiority rather than equivalence is hypothesized.

At least in the first year, and possibly in the second and third years, two instruments will be used in addressing question 4. The Career Maturity Inventory (CMI) was chosen because of its wide acceptance as an evaluation tool for career education, as witnessed by its application to NIE/EBCE model programs. The NED-developed Career Orientation Battery (COB) was chosen because of its more direct relationship to CEB's outcome objectives and its administration time of less than one-third of CMI's two and one-half hours. The revised COB form 912, designed for secondary students, was developed on the basis of psychometric data of the 912 experimental edition, which was administered to over 500 students during 1975-76. The revised form which will be used for CEB is also being used in the evaluation of another OE-funded EBCE program, where it will be administered to over 1,000 students in December, 1976. Content validity of the COB has been established through review by career educators nationwide.

The CMI consists of six scales:

Attitude Test

Competence Test

Part 1: Knowing Yourself

Part 2: Knowing about Jobs

Part 3: Choosing a Job

Part 4: Looking Ahead

Part 5: What Should They Do?

The COB consists of seven scales, the first six of which are described on the attached scale description:

Career Planning

Work Behavior

Attitudes toward School

General Occupational Information

Work Attitudes

Specific Occupational Information

Sex Equity

Job-Seeking Skills

Psychometric properties of the COB, including scale correlations with the CMI and the internal consistency of scales, will be investigated on the basis of pre-test data collected in January, 1977. These results and results of post-testing will be used in determining whether there is justification for eliminating either the COB or the CMI for year two and three evaluations. Another possible way of reducing testing time is through the use of selected scales of both the COB and the CMI.

QUESTION 5: WHAT IS THE EFFECT OF EBCE UPON LONG-TERM RETENTION OF ACADEMIC LEARNING?

It is hypothesized that more academic course content is retained on a long-term basis by EBCE students than by students who learn in the traditional classroom setting.

This question will be addressed only once during the three-year evaluation. Subjects will be eleventh graders who complete the year-long EBCE program in 1977-78 and their associated members of the 1977-78 CG group. EBCE students, like other Greeley High School students, will be enrolled in courses of the school's curriculum, even though the method of learning the material of these courses will be substantially different.

In May, 1979, a year after the EBCE experience, these treatment and comparison students, at this point seniors, will be tested on the content of their junior-year academic courses. The tests will be the final exams used by Greeley High School teachers who taught the courses during 1977-78. The EBCE and/or NED staff will work with these teachers during the Spring of 1978 on the development of tests which are more concept-oriented than typical teacher-made instruments; textbook publishers' tests also will be reviewed for recommendation as alternatives to teacher-designed tests. Teachers will be encouraged to use examinations yielding a numerical score, rather than a simple letter grade.

Teachers will administer their final exams in the usual manner in June, 1978. Copies of the tests and keys will be held on file when a full listing of students' scores. In May, 1979, treatment and comparison group students will complete all final exams corresponding to their junior course schedule. Objective tests will be scored by NED; others will be scored by the teacher who developed the test. Raw scores on each test will be converted to z-scores using as a reference the distribution of scores of the original administration of the tests as a final examination the previous year. Since the number of students taking any given test will probably be small, all normalized scores will be grouped according to the discipline of the course (English, mathematics, science, or social studies). Normalized scores of the EB and CG groups will be compared for each curriculum area using two-tailed t-tests for independent samples with an alpha level of .1.

Clearly, the bias of this evaluation strategy is in favor of the comparison group, as the test instruments will be more directly related to their classroom instruction than to EBCE instruction in the same concept. Encouraging and assisting teachers to develop concept-oriented exams will alleviate this bias to some degree, but it cannot be eliminated. An additional bias would result if the comparison groups had taken the examinations the previous year but the EBCE students had not. This bias will be corrected by administering the classroom final examinations to EBCE students at the conclusion of their junior year, even though there are no specific plans for using those test results.

QUESTION 6: WHAT BECOMES OF EBCE STUDENTS AFTER THEY LEAVE THE PROGRAM?

Annual follow-ups of all EBCE and comparison group students will be conducted for the duration of project funding. This means that first-year students will be followed-up twice and second-year participants once.

Two strategies will be employed in investigating EBCE leavers' re-adjustment to high school. First, final grade point averages in science, mathematics, English, and social studies courses will be computed for EBCE students returning to high school and compared to identically-computed GPA's of comparison group students of CG and CY. The analysis of variance will be used to determine whether the three groups show different GPA's. If they do, Dunnett's test of multiple comparisons will be applied.

Second, the first-year follow-up of EBCE students returning to Greeley High School will include interviews with their teachers conducted during the late fall. These semi-structured interviews will address comparisons of former EBCE students to other students in terms of maturity, study habits, and preparedness for the courses in which the student is enrolled.

Telephone interviews will be used to follow-up former EBCE students and students from both CG and CY comparison groups who have left the high school. These will be conducted by CEB LC's in the evenings during the summer and will focus on employment or educational status. Of special interest will be the difference between EBCE and comparison groups with respect to satisfaction with their current endeavors and the number of changes in their career plans since leaving high schools. Former EBCE students will also be questioned about their retrospective perceptions of their EBCE experiences.

QUESTION 7: WHAT TYPE OF STUDENT IS ATTRACTED TO EBCE?

Interviews with program applicants will include questions concerning the student's reason for interest in the program. Applicants will also be asked to compare themselves to friends who did not apply to EBCE. Responses will be recorded by CEB interviewers and analyzed by NED. Results will have implications for CEB recruiting practices as well as for the nature of the program itself.

EBCE applicants who are accepted into the program will be compared to the general population of Greeley High School on some variables to the CG group on others. Statistical tests of significant differences may be applied where appropriate but the major purpose here is to draw a profile of EBCE students in terms of how they vary from each other as well as from non-EBCE students.

EBCE students will be compared to Greeley High School students in their respective grade levels on the following variables:

- 1) School attendance records of the previous year
- 2) Average grades in English and math courses from the previous year
- 3) Sex
- 4) Proportions of representation of the academic and career curricula.

These results, influenced by both recruiting and selection practices, will provide indicators of the degree to which CEB is serving a diversified and representative group of Greeley students.

Comparisons will be made with CG students on the following variables:

- 1) CTBS, CMI, and COB pre-test scores
- 2) Numbers and types of extracurricular activities during the previous year
- 3) Career plans
- 4) Work history

Results of these analyses may provide insight into the underlying variables distinguishing students who are attracted to EBCE from those who prefer regular high school.

NED will report findings within one month of receiving the required data pertaining to each cycle of student selection and pre-testing.

QUESTION 8: HOW DO EBCE STUDENTS VIEW THE PROGRAM?

Student expectations prior to enrollment in EBCE will be addressed in screening interviews described under question seven.

At the conclusion of each site placement EBCE students will complete a short questionnaire evaluating the experience. Results will be tabulated and reported each semester.

Drop-out rates from the EBCE program will be reported, as well as students' reasons for leaving the program prematurely.

All EBCE students will be asked to complete a short questionnaire upon leaving the program. Some items will call for the students' absolute judgements of various aspects of the program while others will require comparing EBCE to the regular high school program. Results will be tabulated and reported annually.

EBCE graduates will judge their EBCE experience during follow-up interviews described under question six.

QUESTION 9: HOW DO EBCE STUDENTS' PARENTS VIEW THE PROGRAM?

Whenever a student leaves the EBCE program, a brief questionnaire will be mailed with return postage to his/her parents to assess parental attitudes toward CEB. Results will be tabulated and reported annually.

QUESTION 10: HOW DO PARTICIPATING RESOURCE PERSONS AND SITE COORDINATORS VIEW THE PROGRAM?

At the conclusion of each site placement the student's RP will be asked to complete the AEL student Evaluation Form and to return it by mail to the CEB office. Results will be tabulated and reported annually to indicate the impression made by students on their RP's.

Each summer a random sample of RP's and site coordinators will be interviewed in person. NED Interview Guides will be designed to address the following question areas:

How is the intent of EBCE perceived?

How is EBCE seen to benefit students?

How does EBCE disrupt and contribute to sites?

How effective is CEB's management and coordination?

To what degree is site interest in participation maintained over a period of several years?

Is there a snowball effect among community businesses leading to increased participation in EBCE?

CEB's system of site identification includes a record of reasons given to the CEB staff for declining to participate in the program. These records will be tabulated and reported annually.

QUESTION 11: WHAT IMPACT DOES THE EBCE PROGRAM HAVE UPON THE SENDING HIGH SCHOOL?

Although no specific hypotheses have been formed in this topic, some impact of CEB on Greeley High School is likely.

During the spring of each year NED will interview Greeley's principal, vice-principal, guidance staff, and department heads in an attempt to identify any spin-off effects of the program.

As is his custom, the CEB project director will remain abreast of any changes in Greeley's curriculum which occur during the course of the project, with special attention to changes in career education practices in the school. The possibility of cause-and-effect relationship between CEB and observed changes will be investigated.

QUESTION 12: WHAT RESULTS FROM CEB'S EFFORTS TO DISSEMINATE EBCE IN MAINE?

Week-long workshops are planned in August, 1977, and 1978, for representatives of school districts in Maine considering the adoption of CEB's EBCE model. CEB will offer technical assistance to these districts on an ongoing basis through April, 1979.

NED will assist CEB in developing a system for continuous or frequent feedback from participants during the course of the workshops to assure that the program remains responsive to their needs. Final evaluation questionnaires addressing the quality of the full week's experiences will be administered at the week's conclusion and these results will be reported formally.

The quality of CEB's technical assistance will be assessed through questionnaires mailed to clients in April, 1978, and 1979.

The major thrust of evaluation activities concerned with question thirteen will be an investigation of any newly-developed EBCE programs. In cases where EBCE is found unfeasible for a district, CEB's dissemination efforts may nevertheless have an impact on the district's instructional practices; these results also will be investigated. The contact person of each district team participating in workshops and/or receiving technical assistance will be interviewed by telephone during December, 1977, and 1978, for the purpose of investigating the extent and nature of dissemination and CEB's model program.

1976-77

SCHEDULE OF EVALUATION ACTIVITIES

(CEB Activities in Parentheses)

Dec. 1-15	
Dec. 15-31	(Identify EBCE, CG, CY) 1--Checklist of milestones
Jan. 1-15	
Jan. 15-31	3 and 4--Pre-test (1/17-19) of EBCE, CG, and CY, using CTBS, COB and CMI Site Visit (SV)
Feb. 1-15	
Feb. 15-28	SV
March 1-15	
March 15-31	SV
April 1-15	
April 15-30	7 and 8--(Interview EBCE applicants for '77-78) 11--Interview principal, vice-principal, guidance and dept. heads SV
May 1-15	3 and 4--Post-test of EBCE, CG, and CY, using CTBS, COB, and CMI 8--Develop questionnaire for student evaluation of EBCE experiences 11--Written report on interviews of administrators
May 15-31	9--Develop EBCE parent questionnaire (Identify EBCE, CG, and CY for '77-78) SV
June 1-15	7--Written report on interviews of '77-78 applicants 8--(Students given questionnaire regarding EBCE program)
June 15-30	8--Written report on student questionnaires - site experiences and evaluation of EBCE program 7--Written report on comparison of '77-78 EBCE students to Greeley SV
July 1-15	9--(Questionnaire sent to EBCE parents)
July 15-31	10--Interview RP's and site coordinators 12--Develop questionnaires and evaluations for workshop SV
Aug. 1-15	Interim Report 12--(Workshop)
Aug. 15-31	SV

NOTE: Numbers refer to questions in the evaluation plan.

SCHEDULE OF EVALUATION ACTIVITIES 1977-78

(CEB Activities in Parentheses)

Sept. 1-15	3 and 4--Pre-test of EBCE, CG, and CY with CTBS, COB, and CMI
Sept. 15-30	SV
Oct. 1-15	7--SV written report on '77-78 EBCE and CG comparisons
Oct. 15-31	SV
Nov. 1-15	6--Teacher interviews regarding '76-77 EBCE students comparison and adjustments
Nov. 15-30	SV
Dec. 1-15	12--Telephone interview of '77 workshop participants
Dec. 15-31	SV
Jan. 1-15	
Jan. 15-30	SV
Feb. 1-15	8--Written report on student questionnaires regarding site experiences
Feb. 15-28	SV
March 1-15	
March 15-31	SV
April 1-15	7 and 8--(Interview EBCE applicants for '78-79) 11--Interview principal, vice-principal, guidance and dept. heads 12--Develop questionnaire for workshop participants
April 15-30	11--Written report on interviews with above 12--(Mail questionnaire to workshop participants) SV
May 1-15	5--Teacher workshop for final exam development 3 and 4--Post-test of EBCE, CY, and CG with CTBS, COB, and CMI
May 15-31	7--Written report on interviews of '78-79 applicants (Identify EBCE, CG, CY for '77 and '78) SV
June 1-15	5--(Junior year EBCE students take final exams) 5--(Get copies of final exams for EBCE and CG to be administered 5/79) 8--(Student questionnaire on EBCE experiences)
June 15-30	6--(Copies of GPA sent to NED) 6--GPA of '76-77 EBCE students compared with CG and CY 7--Written report on comparing '78-79 EBCE students to Greeley 8--Written report on student questionnaires: 1) site experiences, 2) EBCE experiences 9--(Parent EBCE questionnaire mailed) SV
July 1-15	6 and 8--(Telephone interviews of '76-77 EBCE, CG, and CY H.S. leavers)
July 15-31	10--Interview RP's and site coordinators SV
Aug. 1-15	Interim Report 12--(Workshop)
Aug. 15-31	SV

-12-
1978-79

SCHEDULE OF EVALUATION ACTIVITIES
(CEB Activities in Parentheses)

Sept. 1-15	3 and 4--Pre-test of EBCE, CG, and CY with CTBS, COB, and CMI
Sept. 15-30	SV
Oct. 1-15	
Oct. 15-31	7--Written report of '78-79 EBCE and CG SV
Nov. 1-15	6--Teacher interviews regarding '77-78 EBCE students' comparison and adjustment
Nov. 15-30	SV
Dec. 1-15	12--Telephone interview of workshop participants
Dec. 15-31	SV
Jan. 1-15	
Jan. 15-31	SV
Feb. 1-15	
Feb. 15-28	8--Written report on student experience site questionnaire SV
March 1-15	
March 15-31	5--(Identify EBCE and CG) SV
April 1-15	11--Interview principal, vice-principal, guidance and dept. heads
April 15-30	11--Written report on interviews with administration 12--Mail questionnaire to '78 workshop participants SV
May 1-15	3 and 4--Post-test of EBCE, CG, and CY with CTBS, COB, and CMI
May 15-31	5--12th grade '77-78 EBCE and CG academic test for '77-78 courses SV
June 1-15	5--Academic tests scored by NED and teachers
June 15-30	6--GPA of '77-78 and '76-77 EBCE students compared to CY and CG 6--(GPA of '77-78 -EBCE, CG, and CY- students sent to NED) 8--Written report on student questionnaires: 1) site, 2) EBCE SV
July 1-15	9--(EBCE parent questionnaire mailed) 6 and 8--(Telephone interviews of '76-77 and '77-78 EBCE, CG, and CY F.S. leavers)
July 15-31	10--Interview RP's and site coordinators SV
Aug. 1-15	
Aug. 15-31	Final Report

GROUPS INVOLVED IN EVALUATION ACTIVITIES

<u>Group</u>	<u>Activity</u>	<u>Time</u>
Applicants	Interviews with CEB interviewers (See questions 7 and 8)	
EBCE, CG, and CY students	Comprehensive Test of Basic Skills, Pre-test, post-test reading comprehension, math skills, language skills (refer to question 3) Career Maturity Inventory Career Orientation Battery (refers to question 4)	(Jan. 1977 - May 1977 Sept. 1977 - May 1978 Sept. 1978 - May 1979)
11th grade EBCE students in 1977-78 program associated with CG students	Final exams developed by Greeley High School teachers over courses taught in 1977-78 (refer to question 5)	May, 1979
EBCE students	Questionnaire (see question 8)	At conclusion of each site placement
EBCE students	Questionnaire (see question 8)	Upon leaving program
Former EBCE, CG, and CY students who leave high school	Telephone interviews (to check satisfaction with current endeavor, number of changes in career plan, and perception of EBCE program)	Summer evenings
Greeley H.S. 11th grade teachers	Devise final exams which are concept oriented (refer to question 5)	Spring, 1978
Greeley H.S. 11th grade teachers	Give the above mentioned final exams in usual manner, hold test, keys, and student scores (refer to question 5)	June, 1978
Greeley H.S. 11th grade teachers	Each teacher who devised other than objective tests grade those tests (refer to question 5)	May, 1979
Greeley H.S. teachers who have former EBCE students in class	Interviews (to get comparison of EBCE students to other students in regard to maturity, study habits, and preparedness) (refer to question 6)	Winter
EBCE parents	Questionnaire (see question 9)	When student leaves program
Resource person	Compute AEL Student Evaluation Form and return to CEB office (refer to question 10)	At end of site placement

<u>Group</u>	<u>Activity</u>	<u>Time</u>
Random sample of site coordinators and Resource Persons	Interview by NED (see question 10)	Each summer
Greeley's principal, vice-principal, guidance staff, and dept. heads	NED interview (see question 11)	Spring each year
Representatives of school districts considering adopting CEB's EBCE program	Week-long workshop	August, 1977, and August, 1978
	Evaluation questionnaire	
	Questionnaire to assess assistance	April, 1978, and April, 1979
	Telephone interview to see extent and nature of CEB model program (see question 12)	December, 1977, and December, 1978

Appendix B
Site Visit Reports

NED NEW EDUCATIONAL DIRECTIONS, INC.
a nonprofit service organization
BOX 337 CRAWFORDSVILLE, INDIANA 47933 (317) 362-8877

Memorandum for: THE RECORD

cc: Roy Bagley

Subject: NED visit to AEL on
September 27, 1976

Date: September 29, 1976

From: Fred Gannon

On September 27, Ms. Bonnet and I met in the AEL Offices with Ms. Karen Pffiffner and Dr. Joe Shively. The purposes of this visit were to provide NED with an orientation to the Appalachia Educational Laboratory's (AEL) Experience Based Career Education (EBCE) model which will be replicated in the Cumberland (SAD51) Experienced Based Career Education Program (CEB) and to obtain evaluation instrumentation used by AEL. In addition to accomplishing these purposes, we discussed various approaches to evaluation design and data analysis for the AEL EBCE model as it will be applied in the CEB.

Both Ms. Bonnet and I were very favorably impressed with the instructional materials, the AEL staff with whom we worked and the available instruments and record-keeping forms. These latter materials will have to be modified for use in the CEB effort, but a good base to work from does exist. NED will provide a detailed evaluation model and plan for CEB staff review after the November 1-5 meeting in Charleston and before November 25, 1976. In the meantime, NED staff will begin to review the two foot high stack of materials supplied to us by AEL.

There are several pieces of information which AEL staff conveyed to us and which Mr. Bagley may wish to consider.

1. The specific criteria for the selection of students into the program are the responsibility of each site. The AEL materials commence coverage after students have been identified to participate in the program.
2. The message that Joe Shively is receiving from Joyce Cook is that in reviewing EBCE projects' refunding proposals there will be three areas of priority which will have a heavy impact on refunding decisions. These areas in order of importance are:
 - (a) the extent to which the project is involved in the identification of sex role stereotyping and sexually biased situations, and the quality of affirmative actions taken to reduce sex role stereotyping and sex biases.

- (b) the quality of program implementation and the faithfulness of the replication to the model being adapted by a site.
 - (c) the quality of the evaluation design and the implementation of the design.
3. Although AEL uses an easy entrance/easy exit approach for students, Joe Shively suggests that it causes research and operational difficulties because of turnover within the student group. He suggested that the CEB consider requiring a student to commit to the program for a minimum of one semester or preferably for one year at a time.

Memorandum for: THE RECORD

cc: Mr. Bagley
Ms. Smith

Subject: NED's October 8, 1976
Site Visit to CEB

Date: October 12, 1976

From: Fred Gannon

I. OVERVIEW

This trip was NED's initial site visit to S.A.D. 51's newly-funded Cumberland Experience Based Career Education Program (CEB). During this brief visit Mr. Bagley, Ms. Smith, and I reviewed the program's timetable and briefly discussed the three major areas of program implementation, the evaluation design, and project activities which will be directed toward eliminating sex stereotyping and reducing sex bias. In addition, there was some initial consideration of the selection process for students to be involved in the CEB.

II. GENERAL COMMENTS

In the funding proposal a time line was presented for twenty-six key functions. Through no fault of the project administration or the S.A.D. 51 administration, the CEB is already seriously behind schedule in several key areas because of delays at the federal level in announcing grant awards and sluggishness on the part of the Appalachia Educational Laboratory (AEL) in providing the training activities for which the project has contracted. NED and the project director are concerned with variations from the time schedule. Some of the areas of concern are briefly noted below.

1. August 1976 was the original target for hiring the director and interviewing staff. The director and the assistant director actually reported for duty on September 20--fifty days off schedule because of OE's delay in announcing grant awards. There is no way that these fifty days can be retrieved, but Mr. Bagley and Ms. Smith are working diligently to get back on schedule.
2. Staff hiring was to have been completed during August and September 1976. Mr. Bagley has been interviewing candidates and on October 8 one of the learning coordinator positions was filled, but it will be some weeks before that individual will be on site. The project has been fortunate in obtaining the services of a well-qualified, temporary secretary who will continue to provide backup as needed for the regular project secretary who reported for duty on October 12. It has been decided that the second learning coordinator's position will not be filled until just prior to the students becoming involved in the program. It appears that the three professional positions currently filled will be able to accomplish the necessary preparatory work. Therefore, NED endorses this decision.

3. Arrangements for transportation were to have commenced in September and no action has been taken in this matter as yet. Although the availability of transportation does not become crucial until January 1977, some lead time will be required for the purchase of equipment. NED urges the project director work with Mr. Hamlin on completing transportation arrangements by the end of this month or as soon thereafter as possible.
4. Organizing of the office and ordering materials was to have been completed during the month of September. As noted above, the project secretary assumed her duties on October 12, and a high initial priority will be organizing the project's filing and record-keeping systems and the ordering of necessary materials and equipment such as desks, files, etc. Renovation of the current CER facilities have not begun yet and NED seriously questions the advisability of renovating the present facility. (Physical requirements are discussed below separately).
5. In the original time schedule, the Greeley High School faculty were to have received an orientation to the CER Program. This was not accomplished but an initial orientation meeting has been scheduled for later this month.
6. The initial training of CER and NED staffs by AEL in their model was originally scheduled to be accomplished during the month of October but AEL has delayed the week-long training session until November 1-5. However, Mr. Bagley did visit the AEL site on September 20 for the purpose of contract negotiation and to receive some orientation to AEL procedures. Ms. Bonnet and I of the NED staff met with Dr. Shively and Ms. Pfiffner at the AEL site on September 27, for the purpose of discussing evaluation instruments and procedures. In addition, Ms. Pfiffner did spend October 7, at the CER site training Mr. Bagley and Ms. Smith in site analysis techniques. While the project is behind schedule in receiving training in the AEL model, it appears that they will be back on schedule by mid-November.
7. Site analysis was originally scheduled to begin in November 1976, and to continue through April 1977. On October 8, 1976, Ms. Smith completed the first site analysis thereby putting CER ahead of schedule in this facet of the program.
8. The purchase of resource materials was scheduled for completion in October and has been accomplished. Mr. Bagley has worked with the representatives of five major publishers and has obtained resource materials in the basic academic areas.
9. Advisory committee meetings were originally scheduled to start in October but the CER staff have not even begun to identify possible membership for the group. The existence of a functioning advisory committee is a term of the grant and the project must take action to identify possible members and get the committee operational. NED suggests that the project staff place a very high priority on establishing this committee and in defining project's expectations for that committee. It is recommended that these activities be fait accompli by no later than mid-November and the committee's initial meeting be scheduled before the end of November.

10. The funding proposal commits CEB to issuing a monthly newsletter commencing in October. The October issue of the S.A.D. 51 newsletter will carry an article on CEB prepared by the project staff. The target date for issuing the first CEB newsletter is October 29.

The remaining sixteen functions identified in the time line are not yet scheduled to be accomplished but NED will continue to monitor these activities as appropriate during site visits.

In NED's judgement the current CEB facilities even with renovation will be inadequate to the program's needs and it is strongly suggested that other housing be sought for the project. At a minimum the project will require study space for individual students, a resource room which can accommodate up to 25 students, relatively private office areas for the learning coordinators to work with students, and office space for the project administrators and secretary. The present facilities are 25-50% short of the required space needs even with renovations. It is further suggested that the project not be housed in either the junior or senior high school: because of the way in which student learning experiences are structured in an EBCE model, misunderstandings can develop and engender friction between EBCE students and staff and the students and staff of traditional programs.

Mr. Bagley has decided to develop a management-by-objectives system for the project. This system will be reviewed by NED during the week of November 1.

It was agreed that NED staff will be involved in developing student selection procedures for the project.

The CEB has already developed policies and strategies addressing sex stereotyping and sex bias. Specifically, the project will make every attempt to:

1. maintain a sex balance for students participating in CEB which is equal to the sex split nationally;
2. make at least 10% of the student placements with workers in non-traditional sex roles (i.e. male nurses, female lawyers, etc.); and
3. develop an aggressive action plan for both CEB staff and Greely High School staff which will include the NEA program on sex stereotyping in text books as well as training sessions in December utilizing the services of Ms. Joyce Phelps who is a recognized leader and authority on combating sex stereotyping and bias.

III. SUMMARY

The CEB is currently off schedule in several major areas but the prospects appear excellent that by the time students are being recruited, the project will be on schedule.

Memorandum for: MR. BAGLEY
cc: Ms. Smith

Subject: November 20, 1976
Inservice Session

Date: November 22, 1976

From: Fred Gannon

This memorandum is intended to summarize the decisions concerning the EBCE English courses as accomplished by the Greely High School English Department as represented by those teachers attending the workshop. First, however, I would like to put two general observations concerning this session into the record. First, in my opinion, Karen Pfiffner did an outstanding job in presenting the EBCE model, its history and application, as developed by AEL. Second, rarely have I been presented an opportunity to work with a group who possess such overall positive attitudes as was true of these teachers. Their questions and comments were directed at clarifying their understanding of the curriculum and conveyed the idea that they were interested in making the program "work" and to provide Greely High School's students with the best possible learning experiences.

During the general session, Mr. Humphreys brought up the issue of sequencing within various courses. Therefore, I raised the question of sequencing with the English teachers. This group did not view sequencing as a major concern indicating that the covering of all subconcepts identified as essential for a given course was a concern but only in the teaching of grammar was sequencing important. The group did suggest that the learning coordinator utilize a system to assure that all subconcepts are adequately covered before a student receives credit for a course. This is an area on which Mr. Bagley may wish to work with the NED staff on November 29 and 30.

The AEL Standard English course appears to be comparable to the English courses taken by GHS's freshmen and sophomores. As such, only those juniors and seniors who are identified by the teaching staff as not having adequately mastered the freshman and sophomore courses' content would enroll in the AEL Standard English program.

The AEL Business English course appears to be acceptably comparable to GHS's Business English course.

The AEL Literature course could be usable as a general literature course but this group suggested that it would be better to further focus the literature courses (i.e., "short story," "nineteenth century American novel," "Elizabethan Drama," etc.) to make them more comparable to the courses offered to GHS's juniors and seniors.

The subconcepts identified by this group as essential for each course are summarized below.

<u>Subconcept</u>	<u>Business English</u>	<u>Literature</u>	<u>Standard English</u>
EC 1.1.0	x	x	x
EC 1.2.0	x	x	x
EC 1.3.0	x	x	x
EC 1.4.0	x		x
EC 1.5.0	x	x	x
EC 1.6.0		x	x
EC 2.1.0	x	x	x
EC 2.2.0	x	x	x
EC 2.3.0			
EC 3.1.0	x	x	x
EC 3.2.0	x		
EC 3.3.0		x	x
EC 3.4.0	x	x	x
EC 4.1.0	x	x	x
EC 4.2.0	x	x	x

This group did not add any subconcepts for any of the courses. They did indicate, however, that they would review the concepts and subconcepts more carefully and if, as a result of this review, additional concepts or subconcepts which should be included are identified, the teachers will contact you or Ms. Smith.

Although the group voluntarily worked well past the announced closing time, there were some tasks that were not completed and remain to be done. Each of the participating teachers seemed to indicate a willingness to continue working with you and your staff until all necessary tasks have been accomplished. None of the career education, social science, natural science, or mathematics concepts and subconcepts which might relate to English credits were reviewed. Activities under non-English subconcepts were not considered at all and activities under the EC subconcepts were given only the most cursory examination.

If you do take this group's recommendation and break out the literature curriculum into courses with more specific focus, and I urge you to do this, the English teachers expressed a willingness to identify specific subconcepts and activities which should be covered to earn course credit which will be comparable to the credit earned in the school setting.

One more time I wish to congratulate the group with whom I was working on their positive outlook and their willingness to make the EBCE approach a worthwhile experience for GHS's students.

I have attempted to accurately report the discussion and decisions of this group. However, I do ask that you validate my perceptions by having the others who participated in the discussions review this memorandum.

Memorandum for: THE RECORD

cc: Mr. Bagley, CEB
Ms. Smith, CEB

Info cc: Ms. Richards, NED

Subject: NED Activities on Behalf
of the CEB During November, 1976

Date: December 1, 1976

From: Deborah Bonnet
Fred Gannon

I. OVERVIEW

During the month of November Ms. Bonnet and Mr. Gannon joined the CEB staff and participated in AEL's week-long training program. Mr. Gannon also participated in the teachers' workshop presented by AEL's Karen Pfiffner on November 20 at GHS. In addition, Mr. Bagley spent November 29 and 30 at NED's headquarters working on the CEB evaluation plan and related matters. During Mr. Bagley's NED visit, revisions of two AEL instruments, "The Work Activities Checklist" and "The Work Situations Checklist", were released to him.

II. GENERAL DISCUSSION

a. AEL's Week-Long Training Program--Prior to participating in this training program, Ms. Bonnet and Mr. Gannon had spent a day in Charleston working with Ms. Pfiffner and Dr. Shively of the AEL staff. This initial meeting which was held in September was informative and worthwhile with a great deal of information presented in a six hour session. Against this background the NED staff arrived in Charleston with high expectations for a profitable week of learning. AEL has a fine experience based program but the week-long training session was largely ineffective and wasteful of the participants' time. The quality of the AEL staff making the presentations was exceedingly uneven. Some of the individuals made excellent presentations but most of them were unresponsive to participants' needs. There was an inflexibility of program format which, by and large, precluded working in small groups as a response to the different levels of knowledge and intentions of the groups attending the sessions. The first morning was a disaster as the major activity was to administer what appeared to be inappropriate and dated instruments to gather data for an AEL study. In our judgement the projects should not be expected to pay AEL to be used as guinea pigs in an AEL study.

The week was not a complete waste of time as some learning took place but with a more flexible format and with an AEL staff who were all of a quality comparable to the best available, what was accomplished in five days could have been accomplished in two or three days.

reconsider the decision for two reasons. First, the purpose of this first year is to pilot LUCE in S.A.D. 51 and to make such adjustments to the AEL model as local circumstances require. If the second LC position is not filled now, the second year is also apt to serve as a pilot year for the new staff member; second, in our judgement, to leave the second LC position open will place unreasonable expectations on Ms. Smith and Ms. Galembeski during this crucial "shakedown" year.

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| 3. Coordinate transportation | Mr. Bayley has discussed transportation with Mr. Hamlin, S.A.D. 51 Superintendent, but no concrete action has been taken yet. S.A.D. 51, however, does have one spare bus which can be pressed into service for CEB if necessary. |
| 4. Organize office and order materials | Done |
| 5. ECCE orientation to H.S. faculty | Done |
| 6. Staff training and development | The new LC participated in the AEL training session during the week of December 6. |
| 7. Site Analysis | Site analysis appears to be progressing quite well. As of December 15, the project director reported that 35 individuals representing 25 worker trait groups (WTG) were ready to be utilized when the project begins to serve students next month. |
| 8. Curriculum development and review | NEC was pleased to hear that the development of additional courses in art and home economics is well under way. We offer our congratulations to the project and to the teachers who are developing these offerings. |
| 9. Purchase resource materials | Done |
| 10. Advisory Committee (AC) meetings | The project director reports that AC membership representing the required groups of students, educators, industry, business, labor, parents, and professions has been identified and that the initial meeting has been scheduled for December 22. NEC is impressed with the project director's expeditious handling of this matter, and we look forward to receiving the minutes of this initial AC meeting. |

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| 11. EBCE newsletter | see reference memorandum |
| 12. H.S. faculty workshops | see reference memorandum |
| 13. Student selection criteria finalized with H.S. faculty | see reference memorandum |
| 14. EBCE orientation for GHS students | At this time the student orientation is in process. |
| 15. Student registration | Student registration is now scheduled to be accomplished by January 14, 1976, with the EBCE student orientation being accomplished during the week of January 31. |
| 16. EBCE staff inservice for sex-fair guidance | The project director has scheduled an inservice session for the CED staff on sex-fair guidance utilizing Ms. Joyce Phelps of Bloomington, Indiana, as a trainer/resource person. Somewhat surprising to CED in view of the national focus on Title IX is the reported hesitancy on the part of S.A.D. 51 administration to capitalize on the project's willingness to share Ms. Phelps' services with the school community. Perhaps some of the other school districts in the area would appreciate an opportunity to participate in these training sessions. If so, these sessions could pave the way for additional regional CED efforts. |
| 17. Technical assistance from AEL | CED has availed itself of AEL technical assistance on three separate occasions--once to work with the CED staff on site analysis and twice to work with GHS and CED staffs on the curriculum component of EBCE. In all three instances, the project administration appeared to be well pleased with the quality of the AEL technical assistance. |

III. NED DELIVERABLES

On December 13, 1976, a draft copy of a three-year evaluation plan which had been prepared by NED staff after consultation with CED's project director was released to Joe Shively of AEL and the project director for review. Upon receipt of their comments, NED will make any modifications which may be required or desirable and then will issue the evaluation plan. The review and issuing of the final plan will be completed no later than January 3, 1977.

IV. GENERAL SUMMARY

In the referenced memorandum, NED expressed concern regarding six areas. The project is apparently making progress in four of these six areas: hiring of LC's, training of LC's, curriculum review, and the organization of the AC. NED, however, continues to urge the project director to fill the second LC position as soon as possible so that individual may participate in the project's pilot efforts during the spring of 1977. In the area of transportation for students, the project director reports only the most tenuous beginning in this important area. Finally, NED continues to be most concerned regarding the adequacy of the project's facilities for serving the students who will be enrolled in the EBCE.

Memorandum for: THE RECORD

cc: Mr. Bagley, CED

Ms. Smith, CFB

info cc: Ms. Richards, NED

Subject: CED Activities during
December 1-15, 1976

Date: December 16, 1976

Reference: NED's Memorandum for the
Record dated December 1, 1976

From: Deborah Sonnet
Fred Cannon

I. INTRODUCTION

As noted in the reference, NED is convinced that the month of December is pivotal in the project's development and it is, unfortunately, also the shortest month of the school year. At the conclusion of November, the project was seriously off schedule in a number of key areas. Therefore, on December 15, NED monitored CED progress through a telephone conversation with the project director. The 1976-77 academic year is the fourth year that NED has worked with the project director; and we have always found him to be forthright and direct but never evasive concerning his projects and staffs. For these reasons NED is confident that the use of the telephone on occasion to monitor CFB progress is a valid technique.

II. CED TIMELINE

As has been noted in previous memoranda, the project was fifty days late in receiving its funding. Nevertheless, the project has retained the January, 1977, date to commence serving students which means that the activities originally scheduled to be accomplished in the project's initial six months must be completed on a collapsed schedule of slightly more than four months.

In the project's funding proposal, seventeen functions were to be started and/or completed by the end of December, 1976. We will comment briefly on each of these seventeen functions.

Function

NED's Comments

1. Director hired and staff interviewed
2. Staff hired

With the hiring of Marsha Galembski, one of the two open Learning Coordinator positions has been filled. It is NED's impression that the project director intends to leave the second LC position open until June, 1977, by having Ms. Smith serve as a Learning Coordinator as well as serving the functions of Assistant Director, Placement Coordinator, and Site Analyst. If this indeed is the situation, NED urges the project director to

Subsequent to the week-long training program, Mr. Gannon participated in a session provided by AEL's Ms. Pfiffner for the GHS faculty. Once again this was an excellent session with a great deal of learning packed into a five-hour session. Therefore, AEL has demonstrated on two separate occasions that the organization can provide efficiently run, worthwhile training sessions. However, in our opinion, the great number of AEL staff used during the week-long program is not only unnecessary but counter-productive. More could be accomplished for AEL clients by AEL utilizing fewer staff of the highest quality available to them.

b. CEB Timeline--As noted in NED's October 12 memorandum, because of delays in the making of the funding decision, the project was fifty days off schedule before it ever got started. The project is still planning to begin serving students on the original time schedule. Therefore, even against the background of a late start, the project is seriously off schedule in several key areas. In the project's funding proposal thirteen functions were to have been accomplished by the end of November 1976.

<u>Function</u>	<u>NED's Comments</u>
1. Director hired and staff interviewed.	The director and assistant director reported for duty on September 20. On November 1, one of the two learning coordinator's (LC) positions was filled by Mr. LaBerge. On November 17, Mr. LaBerge tendered his resignation. LC's must be trained before they begin to work in the program. Thus, hiring of qualified people to be trained and serve as LC's must be a primary concern for the director during the first few days of December.
2. Staff hired	
3. Coordinate transportation	To NED's knowledge no action has been taken to obtain transportation for the program to become operational in a little more than a month. It is past time when transportation arrangements be completed and they have not yet started. This too must assume a very high priority for either the director or assistant director for if equipment is to be ordered, it is assumed that more than a week or two of lead time will be required.
4. Organize office and order materials	This has been accomplished and during NED's January site visit project files and records will be reviewed.
5. EBCE orientation to U.S. faculty	Done
6. Staff training and development	The director, assistant director, and NED staff have been trained but the very important LC's are not on staff and therefore are yet to be trained. (See discussion under 1 and 2 above).
7. Site Analysis	Site analysis has commenced but the number of sites analyzed is at this point far short of the number which will be required to serve the anticipated twenty-five students to be

8. Curriculum development and review
9. Purchase resource materials
10. Advisory Committee meetings
11. EBCE newsletter

enrolled during the second semester of this year. Site analysis is an ongoing process and as long as the project staff continue in their site analysis efforts, this is not of concern to NED at this point in time.

Curriculum development and review formally commenced on November 20 but was not completed. The review of the existing AEL curriculum must be completed prior to students entering the program but the development of new curricula could span the life of the project. The project staff will also work with GHS faculty on the development of a system to assure that, to the extent possible, CEB students receiving credit for a course cover the same concepts as those students taking the course in the traditional setting.

This has been done and NED will review the materials available with the appropriate LC during the January site visit.

The initial Advisory Committee (AC) meeting was to have been accomplished during the project's first four months. At this point in time, NED is unaware of even the initial organizational steps of identifying possible AC members. By law and regulation the project is obligated to utilize an AC. Therefore, this too must be addressed by the project administrators and soon. NED strongly urges the project administration to begin identifying potential AC membership and issue invitations for an initial meeting to be held no later than mid-January.

The project's funding proposal calls for the initial newsletter to be issued during the project's third month with monthly newsletters thereafter. NED is unaware of any project energies being directed to the development of a newsletter and, indeed, during this organizational period is not convinced this would be a wise expenditure of time. NED suggests that the project timeline in this area be revised so that newsletters not be issued until students are in the program and there is some 'student oriented' news to report.

12. H.S. faculty curriculum workshops These have started (see 8 above) and are scheduled to continue throughout much of the school year.
13. Student selection criteria finalized with H.S. faculty The project staff have begun to develop selection criteria but these have not been finalized with the H.S. faculty yet. The criteria identified so far basically are:
- a. student's ability to work without supervision;
 - b. student's attendance record; and
 - c. teachers' judgements of the student's ability to benefit from an experienced-based program.
- NED urges CEB to provide us with a copy of the formalized selection procedures and criteria before mid-December when student selection will commence.

c. NED Deliverables--As a result of Mr. Bagley's visit to NED, we will provide the project by mid-December a draft formal evaluation plan and recommendations on instruments required for the first phase of data collection beginning in January. The recommended instrumentation to be supplied the project will include drafts of NED-developed forms, instruments and procedures as well as language and mathematics diagnostic tests.

d. CEB's Facilities--In NED's October 12 memorandum for The Record concern was expressed relative to the inadequacy of the project's housing. Apparently no action has been taken to alleviate this situation. Indeed, at the time of NED's November 20 site visit renovation of the present facilities had not started with less than two months remaining before the project starts to serve the students. NED continues to suggest strongly that other housing be sought for the project.

III. GENERAL SUMMARY

The project staff have made considerable progress on a number of their stated objectives. However, there are five areas where NED feels the project is seriously off schedule. These five areas are:

1. Hiring of the LC's;
2. Making arrangements for the transport of students;
3. The training of the LC's;
4. The curriculum review; and
5. The organization of the AC

In addition NED continues to be concerned regarding the adequacy of the projects' physical facilities particularly for when the program starts to serve students.

Memorandum for: THE RECORD

cc: Mr. Bagley
Ms. Smith

Subject: NED's January 31, 1977 through
February 4, 1977 and
February 8-9, 1977 site visit

Date: February 28, 1977

From: Fred Cannon, NED
Diane Richards, NED

I. OVERVIEW

This NED site visit was scheduled to coincide with CEB's orientation week and students' first days at experience sites. During this site visit NED staff administered the CTBS English, Reading, and Mathematics subtests, the CMI, and the Careers Orientation Battery (COB) to the students enrolled in the CEB program. The same battery of tests with the exception of the 2½ hour CMI was also administered to a comparison group from Yarmouth High School. With the cooperation of Mr. Humphrey and Mr. Leader of Greely High School a second comparison group of GHS students was identified. Testing of this second comparison group was scheduled to be completed during the week of February 14.

To obtain baseline data for assessing the CEB's impact on the ways in which the GHS staff members' practices and attitudes are affected by the program, the superintendent and key GHS staff members were interviewed by NED staff.

During the first week of this NED site visit, Ms. Chris Lewis of AEL was also on site to provide the CEB staff with technical assistance during the students' orientation week. Before she left Cumberland, Ms. Lewis provided the project with written comments and observations concerning her experiences with the project and her observations of the project's operations. NED concurs with all of Ms. Lewis' comments.

Finally, NED staff utilized a fidelity checklist to assess the project's progress in terms of its adherence both to its funding proposal and to the AEL's EBCE model.

II. GENERAL DISCUSSION

a. Testing--A detailed summary of the pretesting of the CEB students and the two comparison groups will be issued as a separate report as soon as possible after the GHS comparison group answer sheets are received and processed. At this point, let it suffice to note that the CTBS was administered to the CEB students on Monday and Tuesday of the orientation week, scored, and reported to the CEB students on Wednesday of orientation week so that the students could utilize them in planning their academic programs with their Learning Coordinators (LC). The CTBS also was administered to the Yarmouth comparison group on Wednesday, February 9. Mr. Ray Crowley, Yarmouth counselor, expressed an interest in the CTBS results for Yarmouth. Therefore, NED processed these tests immediately and released a report of the scores to Yarmouth on February 11.

b. Adherence to Funding Proposal--The project's funding proposal identified twenty-six functions for which it would be accountable and each of these functions was placed on a timeline. Seven of these functions have either already been accomplished or are not yet of concern to the project. Of the remaining nineteen functions several are discussed in section IIc of this memorandum and are referenced in this section. In general, the project is doing an admirable job of meeting its obligations under the conditions of its funding proposal.

Functions

NED's Comments

2. Staff hired

The director and the assistant director, who is also serving as an LC were hired in September 1976. A second LC was hired and resigned in November of 1976, but was replaced on December 1, by an LC who has remained with the project. (See IIc).

3. Coordinate transportation

The bus that CEB is leasing from S.A.D. 51 arrived in time for the students' first day at the learning sites. During the first three days the director assumed the primary responsibility of coordinating transportation on a day-to-day basis. There were no transportation snafu during these initial days and it is the director's stated intention to have the students assume the primary responsibility for their transportation schedules. NED endorses this strategy for encouraging student independence and responsibility.

4. Organize office and order materials

The project office appears to be well organized with adequate office supplies available. NED continues to be concerned, however, with the adequacy of the CEB facilities for the dual purposes of project office and student center. (See IIc).

5. EBCE orientation to H.S. faculty

Orientation of the GHS faculty by the CEB staff commenced in November 1976 and was still being carried out on February 7 when the project director and superintendent met with GHS administrators and department heads. Approximately one half of the GHS faculty expressed support of and interest in the EBCE program to attend a Saturday workshop in November. NED believes that the professionalism of the GHS staff is such that the overwhelming majority of them will become actively supportive of the program when evidence is available that the program indeed does provide a viable alternative learning situation for some GHS students. (See IIc).

6. Staff training

The project LCs and director as well as two of the NED staff have participated in AEL training. (See IIc).

Functions

NED's Comments

7. Site analysis

As of February 1 a more than adequate number of sites had been analyzed and Resource Persons (RPs) had been identified to service CEB's current enrollments. Site analysis continues to be an ongoing process and thusfar the project has received outstanding cooperation from potential sites in the greater Portland area.
8. Curriculum development and review

The initial review of the AEL curriculum, as noted in NED's December 1, 1976 memorandum, has been completed. The CEB is in the process of developing additional curricula in art, typing, shorthand, and physical education.
9. Purchase resource materials

As discussed in section IIId, NED believes the core materials currently available at the CEB site for use by the LCs and students are inadequate, NED urges the CEB staff to place a high priority on the identification and purchase of core materials for the courses being offered.
10. Advisory committee meeting

(See IIc).
11. EBCE newsletter

The funding proposal called for a monthly newsletter to be issued from October 1976 through June 1977. CEB has revised this function to "issue an occasional newsletter as events warrant it." It is planned that the initial newsletter to a great extent will be a student activity. NED endorses this procedure as a desirable way to encourage "student ownership" of the program.
13. Student selection criteria finalized with H.S. faculty

This was accomplished during December 1976. NED does, however, request a file copy of these criteria.
14. EBCE orientation for GHS students
15. Student registration
17. EBCE students begin program

Functions 14, 15, and 17 have been accomplished as during the week of January 31, 1977, 28 students participated in the CEB orientation week and during the week of February 7, 1977, CEB became operational for 28 S.A.D. 51 students
16. EBCE staff inservice for sex-fair guidance

This inservice session was scheduled for early January, but was postponed because of weather. As of February 9 it had not been rescheduled. When it is rescheduled, the project director may wish to invite the S.A.D. 51 and Yarmouth guidance staffs to participate because of their cooperation in providing the control group.

Functions

NED's Comments

18. Technical assistance (TA)
from AEL

During October 1976, Karen Pfiffner provided TA concerning site analysis and during November she assisted in the orientation of the GHS faculty to EBCE. Chris Lewis of AEL provided TA to the CEB staff during the student orientation week. During September, 1976, Ms. Pfiffner and Dr. Joe Shively met with two NED staff members concerning program evaluation. NED found the TA provided on these occasions of high quality and utility. In early December, 1976, the NED-developed evaluation plan was submitted to AEL for review and comment, which Dr. Shively had indicated they would provide by telephone on December 21. However, AEL was not prepared to comment on that date, nor on January 1 when NED called once again. Neither CEB nor NED has received feedback to date.

19. Interim report

CEB's project director issued the interim report to the Region 1 office but some revisions of the report were requested by that office. As of February 9 the interim report had not been revised and reissued by the project. NED urges that this be done in all haste.

21. Planning for summer
workshop

This function is not scheduled to commence until April 1977. However, it is noted here because NED believes that the CEB staff may wish to accelerate the initial planning and publicity activities for the summer workshop. It has been NED's experience that school personnel tend to plan their summer activities early in the calendar year and if a summer workshop is planned, initial publicity should be released no later than April 1.

24. Program evaluation and
review

NED has prepared an evaluation model for CEB and, as noted above, the gathering of baseline data has commenced.

c. Fidelity to the AEL Model--In general, CEB initially appears to be doing an outstanding job of following the AEL model as it implements its EBCE program. As discussed below the availability of physical resources continues to be one of the major restrictions for program development. Where the project has deviated from the model, the deviation is of a positive nature, such as providing additional courses with the exception of the decision not to allow EBCE students to earn career education credits.

Physical Facilities: Space at the project site itself remains a major problem in NED's judgement. The two LCs and the project director share a small office while the secretary and the site coordinator share a second office with the mimeograph machine. There is one room available which can accommodate about half of the students adequately at one time. These three rooms are located above a gymnasium and there is one additional room available on the first floor of the same building which can be used for work with individual students and/or small groups of students. At the present time, the project is also using the GHS library as a resource center (RC) for students.

Core Materials--The core materials that were available in the project office for use by the students and LCs were totally inadequate to the needs of these two groups. The students were, as noted, using materials from the library but materials should be immediately available to both LCs and students at the sites to develop and to implement the Student Activities Sheets (SAS).

Curriculum: The expertise to cover all four disciplines is available within the project staff. In addition to the AEL twenty-eight EBCE courses, CEB is developing and offering courses in French, typing, and shorthand. It is the project's intention at this time to utilize GHS curricula for the courses offered and the project may wish to devote some efforts at establishing a formal linkage between those curricula and the courses offered. During the first week one LC was developing interdisciplinary SASs but the other was not. That the SASs are to be interdisciplinary in nature was emphasized by Mr. Bagley at a February 9 staff meeting and it is assumed that this is now the case. Apparently the GHS administration will not recognize career education as elective credits toward graduation. This causes a serious deviation from the AEL model and is also contributing to some of the misunderstandings and operational problems noted elsewhere in this memorandum. CEB students who elect chemistry or physics must take these courses at GHS. Three students are enrolled in each of these courses. One additional student elected to take Modern European History at GHS although it could have been taken through the project.

Communications: The project has taken a number of concrete steps to create an awareness of the EBCE program's philosophy and operations including:

- (1) An Advisory Council meeting with representatives of all key groups invited held on January 4, 1977;
- (2) Faculty orientations and a workshop spanning the months of November, 1977 through January 1977;
- (3) A letter from the project director to all community resource people involved with S.A.D. 51 career education efforts during the past three years;
- (4) A letter from the project director to the parents of all GHS juniors and seniors;
- (5) An article detailing the program in the Superintendent's newsletter; and
- (6) Meetings between the project director and all parents of students enrolled in the program.

Students Enrolled: It will be verified, but at this point it appears that the students enrolled in the CEB are representative of the various ability levels and socio-economic status levels served by GHS. Twelve of the students are seniors while 13, 1, and 2 respectively are classified as eleventh, tenth, and ninth grade students. The male/female mix, however, is almost 1:2 with eighteen females and ten males enrolled in the program.

Experience Sites: Adequate sites are currently available but continued site development is required and is happening. To dovetail with the project's efforts at eliminating sex stereotyping, it is probably desirable to establish as many sites as possible where the Resource Person (RP) is functioning in a non-traditional role.

d. Interviews--Ms. Richards conducted interviews with GHS's principal, senior guidance counselor, assistant principal, and five department heads, and Mr. Cannon interviewed the superintendent of schools. The interview guide (blue) is attached. Interviews were not scheduled prior to NED's arrival at CEB because it has been the project director's experience that pre-scheduling interviews with GHS staff results in a great deal of rescheduling at interview time. Although the short notice given interviewees was a source of inconvenience to some of them, as the interviews coincided with the due-date for first semester grades, they were, in general, very cooperative and candid in their remarks.

Although the views presented below were not in all cases unanimously expressed by the school leaders nor are the expressed comments always based on objective facts, each point represents a consensus sufficient for NED to consider it worthy of the project staff's attention.

The AEL Model

EBCE is viewed as a form of alternative education and the need to provide alternative forms of learning for some students is appreciated by the school staff.

Several individuals commented on the dynamic and convincing presentation given by Karen Pffiffner of AEL during a faculty meeting in November and remarked that they left the meeting with optimism that EBCE would be a positive component of the GHS program.

Some see it as unrealistic to expect the business world to take time out of their work day to provide learning experiences for students. At the present time, however, the project is experiencing no difficulty in obtaining cooperation in the B/I/I/G sectors of the greater Portland community and obtaining such cooperation has not been a problem for EBCE programs elsewhere in the country.

Communication Between CEB and GHS

This GHS staff feels insufficiently informed concerning CEB's progress from a concept to an operational program. Particular confusion and concern was noted in the following areas:

1. Student selection criteria and procedures used this year.
2. The sending of EBCE students back to GHS for certain classes, contrary to earlier plans shared with the school staff.
3. Plans for measuring academic progress in EBCE courses and for assigning course grades.
4. Plans for dealing with students who wish to drop out of the program before the end of the semester.
5. Plans for assigning students to sequenced courses when they return to the regular program (e.g., will a student taking Typing I through EBCE take Typing II next year at GHS?).

-7-

Although the project continues to attempt to keep GHS faculty informed, there exists a general feeling that the project director has made decisions on matters directly or indirectly affecting the GHS staff without consulting them or without giving adequate consideration to their viewpoints. Although changes in the complexion of the program are perceived, they are not adequately understood by some of the GHS staff.

The CEB Program

Expressed opinions and expectations about the CEB program as some GHS staff sees it developing include:

1. Whereas some of the EBCE enrollees will benefit from the program, most will not.
2. Students will be shortchanged in terms of academic progress. LCs cannot provide in one day per week instruction comparable to that received from classroom teachers in five days per week. Some subjects require daily skill practice which the EBCE program will not offer.
3. EBCE is an "easy way out" for students, giving them unfair advantage in competing with regular students for the honor roll and class standing.
4. The students' maturity and ability to do independent study for credit is suspect.

There is absolutely no indication that the above expectations are coming to pass and NED believes that the project will allay the concerns underlying these expectations of some GHS staff as they work with EBCE students and these students succeed.

Recommendations of Interviewees

Unlike the opinions presented above, the recommendations listed below do not necessarily represent a consensus of the interviewees:

1. The screening process should be altered.
2. EBCE should be an elective, non-credit program.
3. Only seniors needing less than four credits should be eligible.
4. If, for a given course, LCs do not possess the expertise to provide learning experiences which are equivalent to regular classroom instruction, the course should not be offered through EBCE. Furthermore, students requiring or desiring a course which is not offered through EBCE should not be admitted to the program.
5. Communications between CEB and GHS staffs should be a give-and-take cooperative effort. Changes in the program and occasional updates could be communicated by way of a "careergram" or during departmental meetings.
6. The high school staff's expertise should be utilized in developing curriculum and tests for EBCE students.

7. Course titles for the EBCE program should be different from those offered in the high school.

NED's Opinion

Clearly, relationships with the school staff demand the immediate attention of CEB. Although key school personnel presently hold disconcertingly negative views of the program, we are confident that the situation is salvageable if this challenge is met with the determination the CEB staff have demonstrated during three successful years of career education leadership in S.A.D. 51

There is good evidence that the basic concept of EBCE is acceptable to most of the interviewees and to most of the individuals they represent. A concept is by nature easier to accept in the abstract, in the early planning stage, than in operation, when the full implications of the program and their associated difficulties are faced. Thus, the emergence of conflict at this point in the program was predictable and to a degree unavoidable.

Nonetheless, some serious errors have been made and must be corrected. As we see it, the concerns unveiled during interviews fall into the following categories.

1. Immediately correctable through the strengthening of cooperation and communications. The points made by interviewees which we see in category 1 are:

Communications - #1, 2

2. Correctable through further development of plans made in cooperation with the school staff. This category includes:

Communications - #3, 4, 5
CEB Program - #3

3. Not immediately correctable in a direct way, but requiring time and evaluation results to answer. However, open discussion of these concerns is warranted immediately. Sharing the project's evaluation design may alleviate concerns of this type.

AEL Model - Willingness of employees to devote
time to student learning

CEB Program - #1, 2, 4

More specifically, NED submits the following recommendations:

1. Arrange as soon as possible a meeting with the total faculty or with each department. Present a full report of activities accomplished and strategies planned to date. Where there arise questions and concerns which cannot be adequately addressed during the meeting, make note of them and put them on the agenda for the planning committee.

2. Since the technique of involving GHS staff in planning only when CEB has a particular need has been found inadequate, more formal arrangements are needed for joint planning. An expanded planning committee with representatives of the GHS staff interested in and willing to cooperate with CEB might be established and should convene frequently, perhaps every two weeks. Among the first topics to be addressed are:
 - a. Student selection criteria and procedures for next year. We recommend that selection for next year be accomplished before the close of school as planned and that contingency plans be established for students who change their minds over the summer.
 - b. Policies for next year regarding EBCE students who return to GHS for one or more courses.
 - c. Policies and procedures for determining students' eligibility for enrollment in sequenced courses after completing the EBCE program.
 - d. Policies regarding EBCE dropouts.
3. Present and discuss the project's evaluation plan with the planning committee. Mr. Gannon will be available to assist in this effort if required and some changes can still be made in the evaluation plan if this is warranted by GHS's priorities and concerns.
4. Enlist the assistance of the planning committee or individuals selected by the committee in establishing grading practices and in developing curriculum for EBCE, as recommended by interviewees.
5. Extend an invitation to school personnel to observe EBCE student learning experiences both in-house and on-site. If an open invitation receives little response, invite specific individuals to witness specific activities at specific times.

NED endorses interviewee recommendations 5 and 6. Recommendations 1, 3, 4, and 7 warrant consideration but appear to stem partially from misunderstandings which may be corrected through strengthened communications and cooperation. Their recommendation 2, concerning credits given for EBCE students, is in conflict with USOE policy, CEB's funding proposal, and the intent of EBCE, and should be followed only as a last resort. Finally, NED suggests that for the present the project focus its efforts to communicate and cooperate on those who are ready and willing to communicate with the project. Further attempts to change those who are actively hostile and unwilling to work with CEB staff at this point is probably not the best use of project resources.

III. SUMMARY

The project is making progress on all fronts. In the critical areas of adherence to its funding proposal and the fidelity to the AEL EBCE model in its program, the project staff is doing an outstanding job. The deviation from the AEL model in the area of curriculum represented by not providing career education credits is a serious flaw and of concern to NED. We strongly urge the project to work toward the end of instituting career education credits for its students. In NED's judgement, there is certainly sufficient substance to the AEL career education curriculum to warrant awarding elective credit for the course.

The project is working close to its funding proposal and this is a laudable accomplishment. Because of the professional attitude of GHS staff toward any new program and as is to be anticipated, however, the project is being viewed with degrees of skepticism and concern by some of the S.A.D. 51 staff. It is of paramount importance if the program is to continue when external funding ceases, that the GHS faculty become acceptive of and supportive of EBCE by the end of the three-year funding. Nevertheless, it is our judgement, that while the project staff should be attuned to and responsive to the GHS staff concerns, many of them can be effectively dispelled with time if the students currently enrolled in the program are successful and if those who return to the school-based program next year do so with minimal difficulties. The project should continue and intensify its efforts to keep the GHS faculty informed of project policies and activities, to share with the faculty descriptions of its procedures such as selection into the program, and to seek their input wherever possible.

New Educational Directions, Inc. (NED)
P.O. Box 307
Crawfordsville, Indiana 47933
(317) 362-8377

Memorandum for: THE RECORD
cc: Mr. Bagley

Subject: NED's April 25-26, 1977,
Site Visit

Date: April 29, 1977

From: Fred Gannon

I. OVERVIEW

The primary purpose of this site visit was to monitor the project's progress toward its specified goals and to review project and student records. In addition, the post-testing for this year's and the pre-testing procedures for next year's EBCE students and control groups were established. In addition, I was able to "interview" five of the EBCE students and accompany one of the learning coordinators as she made site visits. Mr. Bagley and I also discussed program operations and anticipated modifications for the program's second year.

II. GENERAL DISCUSSION

a. Fidelity to funding proposal--Twenty-six functions were identified in the project's funding proposal for which the project would be accountable. All indications are that the project staff are making substantial progress toward the accomplishment of its obligations under the funding proposal. Several of the specific functions are briefly discussed below.

Functions

NED's Comments

3. Coordinate transportation

The project does have a large bus available and it is used by a few of the students to get to their experience sites. It was reported that almost half of the students furnish their own transportation. Therefore, the project director should probably assess the cost effectiveness of the current transportation arrangements.

4. Organize office and order materials

The office facilities have been considerably improved since NED's February site visit. As noted elsewhere, NED is still concerned with the amount of available space, but the walls and ceilings have been attractively finished and there is ample file space now available for both student and project records.

7. Site analysis

The project currently has more than fifty sites active, but some of the sites, the project director reports, are being excessively used. The site coordinator, however, is continuing to develop new sites. NED suggests that the Learning Coordinators may find it a profitable experience to also become involved in site development during the summer months when they are not obligated to work with the students.
8. Curriculum development

Art, typing, and shorthand curricula are being developed by the project staff to expand the standard AEL offerings. These offerings have not been placed into the AEL format yet, but this is scheduled to be accomplished during the summer of 1977.
9. Purchase resource materials

The amount and kind of core materials available to the students and LCs at the project site are vastly improved since NED's last site visit. It is anticipated, however, as the project moves away from attempting largely to replicate the GHS courses toward a more individualized approach that a greater diversity of materials available will be required. Finally, because the EBCE students represent a variety of achievement levels, it will be desirable to seek materials which cover similar topics and concepts but at different levels of difficulty and reading.
10. Advisory committee meeting

The project has organized an advisory committee and has met with that group once. Since the use of an advisory committee is required by the funding agency's regulations as well as by the project's funding proposal, it would seem wise for the project staff to define specific tasks for the committee and to attempt to utilize the group more actively and with much greater regularity.
11. EBCE newsletter

During this site visit I viewed a student-developed newsletter in the final stages of preparation. It is to be hoped that this document will be produced and disseminated with all haste.
14. EBCE orientation for GHS students
15. Student registration

The orientation and registration of students for the 1977-78 EBCE were scheduled to be accomplished during April and May of 1977 respectively. Both processes have been largely completed at GHS and approximately fifteen new students are in the process of registering for the program. As noted below during the discussions of student "interviews", approximately

ten of the students currently enrolled in the program have opted for a second year in the program even though they generally report the academic demands and general expectations of EBCE to be greater than in a traditional program. Since the EBCE program will be capable of serving more students than the number currently pre-enrolled, it is the project's intent to open the enrollment to limited numbers of students from the neighboring district--Yarmouth. NED endorses this contemplated move toward inter-district cooperation as a positive move and encourages the project director to commence the orientation and registration process at Yarmouth as soon as possible.

16. EBCE staff inservice for sex-fair guidance

Although the project director had completed the initial plans for this activity as early as November 1976, it still has not been accomplished. As was noted above under the advisory committee, action in this area is required by both the rules and regulations of the funding agency and by the funding proposal. Furthermore, it is an area of significant interest to all federal agencies at this time, and all indications are that it will remain so in the coming years. Therefore, I urge the project director to delay no longer in the implementation of this function.

18. Technical assistance from AEL

Karen Pfiffner, AEL, spent March 15 on site and provided the project director with a memorandum summarizing her observations and suggestions.

21. Planning for summer workshop

June 26, 1977, has been established as the tentative start date for the project's summer workshop. The project director has taken the initial steps in planning the program and developing a list of individuals to be invited to participate.

b. Fidelity to the AEL Model--The project staff overall are doing a creditable job of implementing the AEL EBCE model in S.A.D. #51. It is in the implementation of the curriculum that the project apparently is deviating significantly from the AEL model. A review of the Student Activities Sheets (SAS) plus discussions with the Learning Coordinators (LCs) indicate that the instructional programs are only minimally individualized, are largely not interdisciplinary, and generally do not directly utilize the site placements as a part of formal instruction. NED believes the major contributing factors to this situation have been the constraints placed upon the project by the related decisions not to offer career education credits which would increase the flexibility of students' programs and to offer GHS courses with their traditional content. Both of these decisions were made for what appeared at

the time to be good reasons in the form of encouraging harmonious relations with, and acceptance of, the program by GHS faculty. EBCE, however, is intended to be an alternative which provides students with valuable learning experiences which are different from, but equally worthwhile, to those of a traditional secondary school. Therefore, the project administration has indicated that, with the superintendents' endorsement, the project will offer EBCE courses including career education credit rather than GHS courses commencing in September 1977. NED endorses this move with the conviction that it will strengthen the program to the benefit of the participating students.

The log for monitoring resource person (RP) availability and the site descriptions were reviewed and found to be in excellent condition.

Site visits are being made by the LCs and the site coordinator, and I did accompany an LC on such a visit. These visits are informal and are not scheduled in advance. This approach did not appear to cause any major problem although it was one RP's day off and the LC did have to wait about twenty minutes to see another one. NED suggests that a telephone call to schedule visits be made and that the LCs develop a simple checklist of points they wish to cover during a site visit. This checklist could also serve as a site visit report form unless the project wishes to use the AEL site visit report form.

NED continues to be concerned with the lack of privacy as two LCs and the project director share a single office. It is NED's understanding, however, that an additional small office at the site will be assigned to the project and this should alleviate the situation somewhat.

Evaluation activities are proceeding on schedule and the post-testing of this year's experimental and control groups and the pre-testing for the 1977-78 experimental and control groups are discussed below.

c. Project/GHS Communications and Relationships appear to be unchanged from the situation as noted in NED's memorandum dated February 23, 1977.

d. Student Interviews--During this site visit I did have an opportunity to informally "interview" five of the students currently enrolled in the EBCE program. The students selected for the interviews were chosen on the basis of availability (their inhouse day) when I was not involved in other activities. They were all female but there is no reason to believe they are not representative of the total group. They were unanimous in their endorsement of the program. Furthermore, each of them indicated that they felt they were working harder and learning as much or more than would be true in a traditional setting. As a group they acknowledged that the increased freedom and the associated responsibilities required by participation in the EBCE was initially difficult to accept. However, they noted that firm and fair reprimand for transgressions and encouragement for positive performance by LCs and the project director enabled them to accept the responsibilities and to handle the freedom in a mature way.

e. May 23, 1977 Test Administrations--Mr. Bagley and I agreed that it probably is not the best use of NED staff to administer standardized tests. Therefore, the May test administration will be conducted by substitute teachers retained by the project under Mr. Bagley's supervision. Mr. Hamlin has indicated that it will be possible to use Gyger Gymnasium for this administration which will make it possible

to administer to the six groups to be involved in a one or two-day period. This administration will serve as the post-test for this year's groups and as the pre-test for the 1977-78 group. The tests to be administered to each of the groups are noted below.

EBCE 77 = this year's students

CC 77 = this year's GHS control group (matched with EBCE 77)

YC 77 = this year's Yarmouth control group (matched with EBCE 77)

EBCE 78 = next year's students

CC 78 = next year's GHS control group (matched with EBCE 78)

YC 78 = next year's Yarmouth control group (matched with EBCE 78)

TESTS:

Careers Orientation Battery

Career Maturity Inventory

CTBS--Reading

CTBS--Language

CTBS--Mathematics

ADMINISTERED TO:

All Groups

EBCE 77 (also CC 77 and/or YC 77
if possible)

All Groups

All Groups

All Groups

NED will send the COB form and answer sheets to be used in this administration within the week. The other tests and answer sheets are to be obtained from AEL. In addition, all groups should complete a brief, general questionnaire.

EBCE 77 students will be requested to complete one additional questionnaire specific to their EBCE experiences, and which will be returned by them directly to NED. In June questionnaires will be sent to EBCE 77 parents and these, too, will be returned directly to NED.

Should it be necessary to reschedule the actual test administrations until later in the month or early June, NED has no objections. It is important that all groups be as fully identified by the administration date as possible.

f. Staff Utilization--It appears that the project staff are a truly dedicated and hard-working group. The work load for everyone of them appears to border on the overwhelming and this is particularly true of the project director. It is strongly suggested that the project director reassess his duties and responsibilities and that wherever possible he delegate responsibilities.

VII. SUMMARY

The project is implementing a program which is serving students, and this is being accomplished with remarkable smoothness for instituting a program as unique as EBCE. When the modifications to the current program which have been identified by the staff are instituted, S.A.D. #51 should have an outstanding alternative to traditional education available for its students.

NEW EDUCATIONAL DIRECTIONS, INC.
Box 307
Crawfordsville, Indiana 47933

Memorandum for: THE RECORD
cc: Mr. Bagley
Ms. Richards, NED
Ms. Smith

Subject: NED's May 31, 1977
Site Visit

Date: June 6, 1977

From: Fred Gannon

I. OVERVIEW

During this brief one-day site visit I had an opportunity to interview four of the EBCE students and two of the Learning Coordinators, both part time, as well as to observe the two other full-time LCOs as they worked with students. I also had an opportunity to discuss the project's progress and plans with Mr. Bagley and Mr. Hamlin, S.A.D. #51's superintendent. Finally, student and parent questionnaires were provided to the project and distributed by them.

II. GENERAL DISCUSSION

The four students interviewed during this visit were not students who have been interviewed during previous NED site visits. Of the four students interviewed, one was a graduating senior and three were juniors. All four students were enthusiastic regarding the value of the EBCE experience both in terms of personal growth and as a general learning experience. All four students stated that they had no regrets that they had participated in EBCE.

This should not be construed as indicating the student did not offer constructive criticisms for the improvement of the program. The three major "criticisms" of the program which were offered by all three of these students are:

1. Expectations for students' academic performance in the EBCE is much greater than at GHS and for the less able students in the group may be unreasonably high,
2. The course work required within the program is too traditional in nature and not as unique as students were led to believe when they registered for the program. In many ways, EBCE students are expected to complete the same "class" assignments as GHS students with one day a week in house as contrasted to GHS students' five days a week in classes; and
3. The course assignments generally are not related to the site placements thereby not fully capitalizing on the learning potentials of the sites.

It is NED's understanding that "criticisms" 2 and 3 will be corrected next year as the project moves from attempting to replicate the GHS curriculum to the implementation of a highly individualized EBCE curriculum which does utilize the site placements as an integral part of the students' learning experiences. Although the interviewed students "criticized" the level of expectation the EBCE staff holds for them, it appears that they are responding to the challenges in satisfactory ways.

On the positive side, the students indicated that the individualized nature of academic instruction in EBCE encouraged them to learn more and to take their course work more seriously and more personally than would be true in a traditional program. They further indicated that because of the program staff's expectations for them, they were better able to handle independence and responsibility. It was interesting to note as an indication of the EBCE students' level of maturity that none of the students interviewed professed to be fully responsible and independent--quite an impressive admission for students in late adolescence.

Housing continues, in NED's judgement, to be a concern with a marked lack of privacy for the LCs as they work with students. However, the project director has indicated that a first floor room will be partitioned into two LC offices for next year and this should greatly improve the situation.

The post-test for the current EBCE students and the GHS control groups and pre-tests for these groups for 1977-78 have been completed by the project staff. These administrations are scheduled to be completed by the Yarmouth groups during the current week.

NED has already begun to receive parent and student questionnaires. These will be summarized in a separate report to be issued on or about June 17. It is NED's intention to have the project's first year report in clean draft prior to the July 20-21 site visit by the federal monitors. This will mean, however, that employer interviews will have to be scheduled and completed during the current month rather than during July as originally scheduled.

Additional accomplishments for the project since NED's last site visit include the publication of a student-produced EBCE newsletter and a second meeting of the project's advisory committee.

III. NED NEEDS

Please have each LC or the Site Coordinator provide NED with a listing of all nontraditional placements for EBCE students during the current year. This listing should include student name, placement site, and duration of the placement.

IV. GENERAL SUMMARY

As the project moves to conclude its first year, it does so with an impressive record of achievement.

Appendix C
Workshop Feedback Form

Cumberland Workshop

Feedback Form

1. To what degree do you feel these sessions accomplished their stated objectives?
☐ extremely well ☐ well ☐ average ☐ poorly ☐ nil
2. What suggestions can you offer for improving future workshops?
3. What aspects of the workshop did you find MOST helpful or interesting?
4. What aspects of the workshop did you find LEAST interesting or helpful?
5. Do you feel that this workshop provided you with sufficient information in replicating the EBCE program?
☐ Yes ☐ No
If no please give aspects of the program which remain unclear.
6. For what purpose did you attend this workshop?
7. What is your stance, at this point, on replicating the EBCE model?
☐ committed ☐ very interested ☐ interested
☐ not interested ☐ not in a position to make that decision
8. What changes do you plan on making when and if you replicate the model EBCE program?
9. What problems do you feel you will encounter when your school attempts to replicate the model?
10. What are follow-up activities with which Cumberland EBCE can assist you?